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JOURNAL OF THE INDIAN MEDICAL ASSOCIATION

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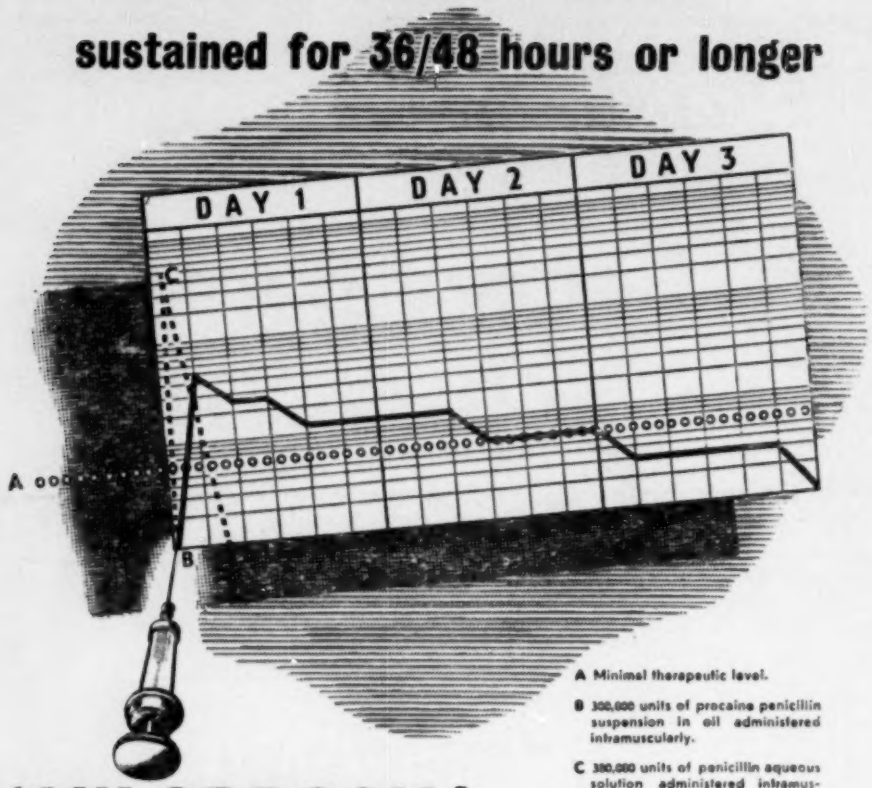

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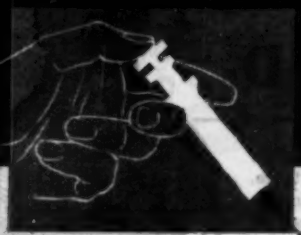

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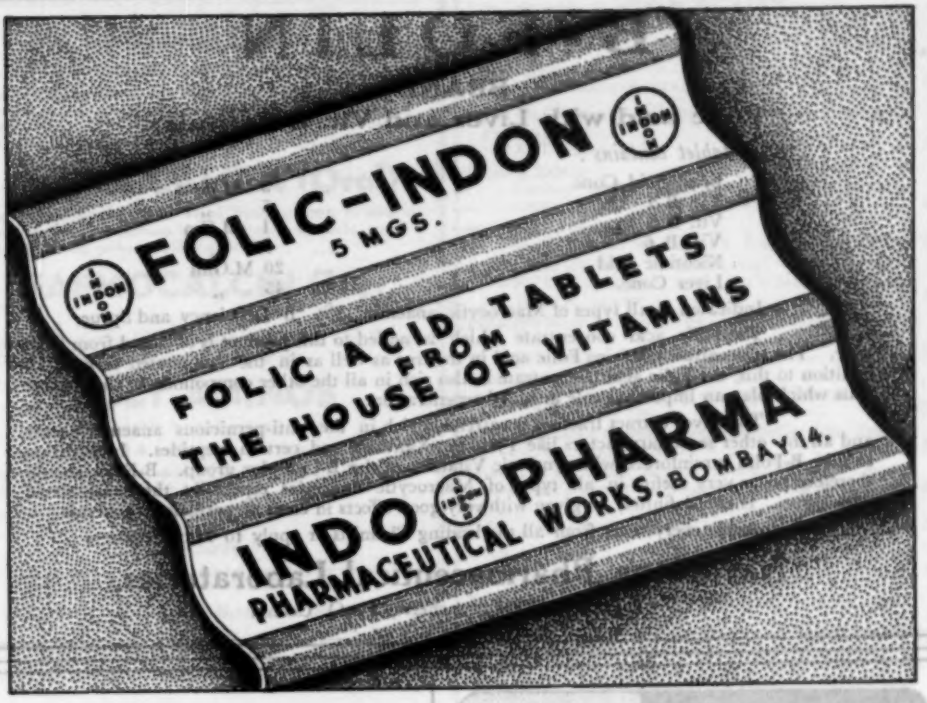

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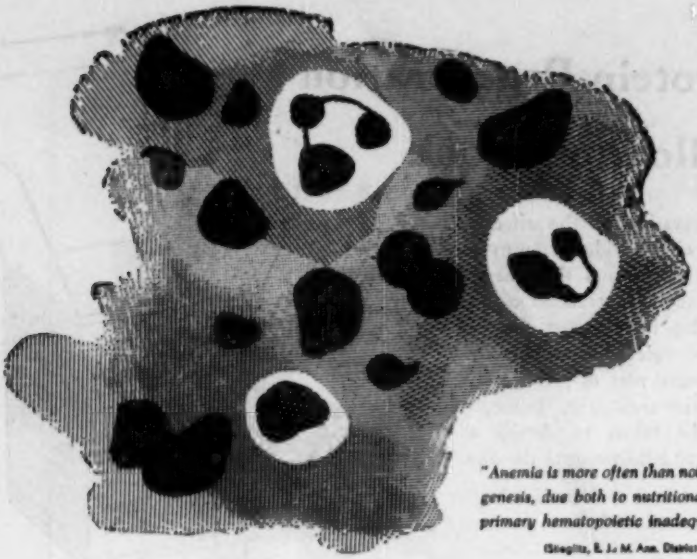

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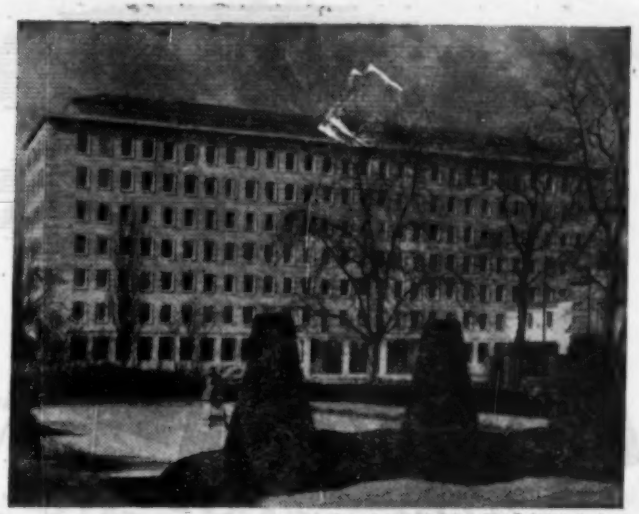

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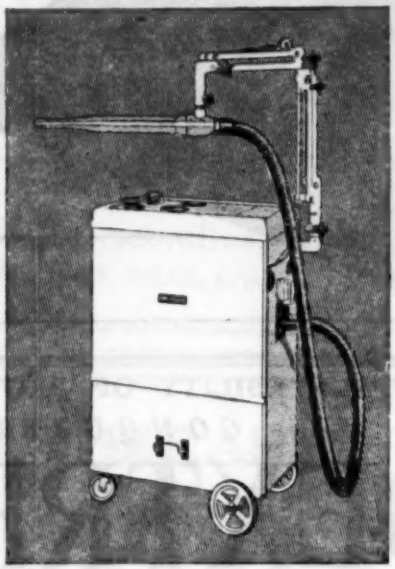

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PEPTIC ULCER

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The subject of this paper is peptic ulcer and its treatment. I need hardly apologise for introducing it to you as its yet uncertain etiology and treatment and the frequency of its occurrence in every day work are sufficient justification for discussion.

This paper contains observations covering a period of five years 1943-48 during which 175 patients were treated at the Gandhi Memorial and Associated Hospitals—110 in medical and 65 in the surgical wards. This distribution in the two departments is interesting as it demonstrates the necessity for surgical interference in such a large proportion of cases in an identical period and it assumes even greater significance when it is remembered what general apathy for operations exists in the mind of the public and reluctance on the part of the physician. That this delay has unpleasant results is the universal experience and it is really with the object of avoiding this and getting better results that I have placed this subject before you.

The average age of the patients is 34 years—with the youngest 14 and the oldest 60 years—72 per cent of the cases being between 35-50 years. Age incidence is of importance in demonstrating the disease period during the most active life of the individual—a period of maximum physical development as well as of stress and strain. What effect this has on the etiology of the disease we shall refer to later. Similarly, the sex incidence showed the disease to be present in 5 males: 1 female. This proportion is slightly higher than reported from other centres. It is interesting that the three cases of carcinoma of the stomach were all found in the female patients. In over 80 per cent of the patients septic foci were found in the body—mostly in the oral cavity.

The clinical history of the cases varied with the site of the lesions and pathological condition of the ulcer. One case was admitted as for 'acute abdomen' and another suffering from acute gastritis. In this period there was no admission for acute perforation or hæmatemesis. 17·5 per cent cases were found to be suffering from pyloric stenosis.

The great majority were admitted for pain in the epigastrium, which had variable relation with food. Rarely a typical history of pain following a definite interval after food was found in the surgical department. Usually the pain was more or less constant and liable to exacerbations. In the surgical section this was more commonly noticed—perhaps because of chronicity of the lesion. Pain was localised to the epigastrium or right hypochondrium. Very rarely it was referred to the back. In five cases this feature was very marked and the most important feature of the lesion. In all of them the ulcer was penetrating through the posterior wall into the pancreas—both in gastric and duodenal cases. We were so struck with this feature that we accept all of them as those of chronic perforation in whom only surgery is likely to be of any use to the patient from the beginning. On investigation it is possible to find periodicity of pain in the early part of the disease. As the condition becomes chronic it disappears.

Vomiting is an infrequent accompaniment of pain although it does occur sometimes and produces relief from pain. The vomitus consists of sour gastric contents and accompanied with eructations. Some complication should be suspected when it becomes a marked feature, *e.g.*, stenosis or hour-glass stomach.

Hæmatemesis and melæna were found in a very small fraction of these cases. Hæmatemesis occurs when a larger blood vessel is eroded but melæna from oozing of the ulcer surface is more common. It has been our experience that appetite is generally very much diminished. This is because of the chronicity of the cases and the associated chronic gastritis. In the early stages it is not really altered and the patients declare that they can take their normal meal but are disinclined to do so because of the fear of pain which may follow. A very definite loss of appetite after a number of periodic attacks of pain is a sign for malignant change. We could never discover distaste for any particular type of food in these cases.

Physical Findings

The patients of this series were ill-nourished and showed some anæmia with low blood pressure around 100 mm. of mercury. This is again ascribable to prolonged malnutrition during the several years of disease. A marked wasting was noticed in cases which were complicated with pyloric stenosis or carcinoma and is a danger signal. Usually it was not possible to palpate anything in the abdomen of the nature of a lump except when chronic inflammatory changes,

e.g., chronic perforations or malignant changes were present.

Skiagraphic investigations are valuable aids in diagnosis and determination of site of the ulcer. It is not necessary to take a skiagram at any definite time after opaque meal but to find out the constant reaction of stomach and duodenum to the meal as it is passed along. A fluoroscopic examination instead of the ordinary skiagram is most likely to be of value and should be done whenever possible.

Test-meal—The results of this test vary with the gastric or duodenal type of ulcer. A chronic gastric ulcer did not show much variation from the normal except a high initial total and free acidity and a slightly raised general curve. All these were much raised in the duodenal type. In old-standing gastric ulcers or those with pyloric stenosis or malignant changes there is achlorhydria or markedly low acidity. Test meal investigations should be carried out at regular intervals in the post-operation period. A normal curve shows a low initial acidity which rises to its maximum about 1½ hours—shows a slight fall at 2 hours and after a secondary rise at about 2½ hours falls to the normal initial level. Interpreted physiologically the curve depicts the secretion of the gastric glands in the resting period and when the stimulus for increased production of gastric juice reaches it in the shape of the test meal.

This stimulus is carried by the secreto-motor nerve of the gastric area—the vagus, and depending on its activity or otherwise there is more or less gastric acid juice poured out. It has to be pointed out that this stimulus and its response comes and is ordinarily maintained for a variable time. The second factor which is responsible for gastric juice acidity is the hormonal stimulus from the mucous membranes of the pylorus and duodenum excited by the presence of partly digested food, *e.g.* peptone. This will come into play after the food has been partially digested and continues to function till such time that all digested food has left the "hormonal zone." Is it not possible—although there is no proof for it yet—that the first rise in the gastric juice curve is due to vagal stimulus and the second sustained one to hormones? It is, today, most important to understand these factors because the only constant finding in all peptic ulcer cases is the hyperacidity which exists before, during and after treatment and in all cases of so-called 'recurrence.' And when we remember that the main cause of peptic ulcer formation is hyperacidity we reach the crux of the problem today. Whatever may be the initial cause of lowered vitality of the gastric mucosa—thrombosis, embolism, septic foci or specific infection—it is the high and prolonged gastric acidity which dissolves out the devitalised part and produces and maintains the peptic ulcer. Thus if we can remove gastric acidity we can cure gastric ulcers. All the various methods of treatment have aimed at this—be it Sippy's dietary, alkaline and belladonna medication or operative interference.

Treatment

If the acidity is kept neutralised by the frequent administration of alkalies—the ulcer is allowed time to heal. That this occurs frequently in the case of acute ulcers has been proved often—both in clinical and post-mortem results but whether the cure can be effected in chronic cases is very doubtful. The histology of a chronic ulcer shows fibrosis of its margins and a crater-like erosion of the mucous membranes, muscular layer and down to the serous coat. Such ulcers on the cutaneous surface do not heal without operative interference and it is difficult to believe that they can heal inside the stomach. That they do not do so is shown clinically by the frequent 'recurrence' under medical treatment and the naked eye and histological changes seen on the operation table and in post-mortem room. It is true that they do get relief from the varying pain but this is only temporary.

The surgical measures to reduce acidity are:—

(1) Short-circuiting or gastro-jejunostomy.
(2) Partial or subtotal gastrectomy.
(3) Ligation of gastric blood vessels.
(4) Resection of vagus nerves.

Gastro-enterostomy came with a great flourish nearly half a century ago and held the field for a little over quarter of a century. The results of this operation have been amply evaluated against time and have been so unsatisfactory that the operation is rightly universally condemned and is carried out only in exceptional circumstances. The series under review contains 13 such operations out of 50 operated upon for this condition. This was in 1943 and 1944 when in the face of our own poor relief in symptoms of the patient this operation was given up. Physiologically also, this operation is unsound in principle as there is no regurgitation of alkaline fluids through the stoma to neutralise the acids and there is no removal of the acid-forming areas of the gastric zone. The results have been what should have been expected—persistence of pain in all its severity and the all too correct blaming by the physician that the patient has fallen back on their hands even after operation.

A partial or sub-total gastrectomy appears to be the most rational procedure uptodate. This aims at removing the whole gastric acid-producing zone plus that of the antrum, pylorus and duodenum. Thus the effects of the vagal and hormonal stimulation are removed together with a large number of vagal nerve fibres. It also removes the ulcer-zone—that fixed part of the gastroduodenal area where ulcers abound, flourish and turn malignant—and leaves just sufficient gastric tissue for lodging the incoming food. The hyperacidity and ulcer-bearing area being removed the patient gets complete relief from his symptoms. This operation has been carried out in 16 cases of this series with a mortality of 5 per cent—in the whole section and, in one portion, of only 1 per cent. This is almost negligible and represents the risk any patient runs in a major surgical undertaking.

The operation of vaso-ligation has been advocated by Heys of Lancashire and Sommerville of Travancore and aims at ligation of all the blood vessels of the gastric area short of producing gangrene. The diminished vascular supply should decrease the gastric secretion and acidity and cure the symptoms. The results have not been satisfactory and the method has no followers in this country or abroad.

The resection of the vagus nerves holds the world's surgical stage, as the answer to all the troubles caused by peptic ulcers. Either through transabdominal or transthoracic route excision of the vagi and all its branches will remove all gastric acidity. The latest articles by Beattie quotes 961 vagotomies performed at various world centres and they claim very gratifying results. This series includes only one vagotomy carried out by two of us (T.P. & R.N.S.) and the results are not such as to be encouraging for others. The resultant gastric distension had a very deterrant effect. However the number is too small for any sort of opinion, much less generalisation.

We have, therefore, come to the conclusion that considering the histology of chronic peptic ulcers and the coexistent hyperacidity the only treatment which will give complete cure is subtotal gastrectomy. In trained hands the operative mortality is as low as of any other major surgical procedure and by removing the ulcer and acid forming areas it offers today the best physiologico-pathological means of treating this condition. All cases of chronic peptic ulcers should be treated surgically from the times they have been proved to be chronic. Any tinkering with alkalies and belladonna is only likely not only to delay the treatment and lead to malnutrition and greater surgical risk but also to lull the patient into a false sense of security which makes him shirk the operation and face the possibility of that most dreaded of maladies—carcinoma.

SOME OBSERVATIONS ON SURGICAL TREATMENT OF ENLARGED PROSTATE

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Benign enlargement of the prostate gland occurs in 20 per cent of all males reaching above the age of 50 years. Of these 20 per cent suffer from prostatism (the syndrome consequent to the enlargement of prostate). It will, therefore, be evident that enlarged prostate forms a very frequent malady and its importance is greatly enhanced because it presents a vexed problem to the surgeon from the point of view of treatment.

The first twentyfive years of this century witnessed a lengthy controversy between the protagonists of suprapubic and perineal routes. The development of transurethral resection procedures in 1931 gave hope to many that the prostatic milleneum had arrived, but despite many ingenious improvements in armamentarium this has not secured widespread acceptance.

Terrence Millin of All Saints Hospital for Genito-urinary Diseases, London, has sponsored yet another approach by retropubic route. He has claimed superiority over other classical routes by the relative simplicity of the technique, greater safety to patients and shortened convalescence.

There has been a good deal of discussion on the relative merits of one-stage and two-stage prostatectomy and the subject is engaging the attention of urologists.

Thomson Walker, Winsbury White, Riche and Clifford Morrison are strong advocates of two-stage prostatectomy by classical Freyer's suprapubic technique (dissection enucleation) and claim that their technique duly allows for patients' condition to be corrected from a bad surgical risk to a good one. Direct signs of significance as haematuria, albuminuria, poor renal functional tests and urinary tract infection should never be overlooked and due regard of these can only be taken with a careful preoperative preparation. This two-stage technique in their opinion is the only one which can meet the above requirements. Prostatism on the other hand leads to important complications which warrant due pre-operative care, *e.g.*, oedema of the ankles, drowsiness, epididymitis, flatulence, dyspepsia and diarrhœa, signs of paralytic ileus, hyperpiesis, dry coated tongue, headache and exacerbation of chronic respiratory and cardiac diseases, all have their bearing in ultimate prognosis, and hence their importance cannot be ignored.

Chronic retention cases stand one-stage operation badly like infected cases with apparently good renal functions. Delayed-action prostatectomy has given encouraging results in serious cases with marked urosepsis, grossly poor renal functional capacity and advanced cardiac and respiratory disease.

Others like William Hay, Stock and those of his school have reported very strongly in favour of one-stage 'aseptic prostatectomy' in which no pre-operative instrumentation is allowed as it introduces sepsis. Out of 273 cases reported by them only 6 died and in these cases there was history of previous instrumentation.

Dissection enucleation is carried with diathermy haemostasis which should be perfect. Trigonectomy has been also done with prostatectomy by Hey and he has also gone to the extreme limit of performing this operation as an emergency in cases approaching during the phase of acute retention. In his monograph he has emphatically stressed the advantage of clinical judgment which in his opinion is the only deciding factor in the midst of such varied pathologic pictures presented by these cases of enlarged prostate. He has in his words not refused a single case the benefit of immediate operative treatment and the period of hospitalization is thereby considerably lowered.

Under such conflicting opinions and diversity regarding treatment we have to consider the appropriate line of treatment for cases seeking surgical aid in our hospitals. I have in this paper reproduced

some of my personal observations on the cases attending the hospital during the last four years and which have undergone treatment under our care.

Case Analysis

A series of 209 cases of enlarged prostate have been reported. A good majority of these cases were of advanced type and came late when life was unbearable and operative treatment was required as a life saving measure. They are poor surgical risks and inspite of prolonged preoperative treatment only 71 cases were found suitable to have prostatectomy.

7 cases were treated by one-stage prostatectomy by original Freyer's technique.

In 3 cases retropubic approach of Millin was done.

In the other 61 cases—7 were those in which delayed-action prostatectomy was done after an average period of four months of the first-stage operation.

Of all cases reported suprapubic drainage was done in 82 per cent cases and of these only 38 per cent were fit enough to undergo a subsequent second-stage operation.

Freyer's technique was followed in 89 per cent of these cases either operated after an average interval of 3-4 weeks or in delayed-action prostatectomy after an average interval of seven weeks.

Signs and Symptoms

These usually can be classified under the following groups:—

(*a*) Genitourinary,
(*b*) Altered mental state or psychical,
(*c*) Gastrointestinal,
(*d*) Cardiovascular and respiratory,
(*e*) Drowsiness and coma and
(*f*) Intercurrent infections.

The common *urinary symptoms* found were—

Frequency of micturition in	78	per cent
Difficulty in micturition and urgency with chronic retention in	66	„
Acute retention in	18	„
Overflow incontinence was present in	21	„
Haematuria was comparatively a rare feature and was present in	4	„

Frequency of micturition was mostly complained in early hours of morning as at that time patients are forced to wake up from sleep, but careful inquiry revealed a twentyfour hours frequency.

Chronic retention leads to toxic state which can be categorised under two types:—

(*i*) Dry tongue, falling urinary output, drowsiness with no appreciable rise in blood urea level.

(*ii*) No drowsiness, no diminution in excretion, but with marked elevated blood urea level.

Uræmia was present in	86	per cent
Headache	46	„
Drowsiness	9	„
Dry coated tongue	84	„
Coma	13	„
Chronic nephritis	18	„

Elevated blood urea average 70 mgm. per cent. Poor renal functional capacity average by Mclean's urea concentration test 1·0 per cent, were the commoner evidence to indicate the damage wrought by the disease on urinary tract.

Gastro-intestinal symptoms—Diarrhœa has been found to be very common in 46 per cent cases. Nausea and vomiting were present in 16 per cent cases. Ileus was present in 16 per cent cases.

Sexual eroticism, depression of spirit and nervous irritability were noted in a good percentage of cases—30 per cent.

Cardiovascular symptoms—Hyperpiesia was not a very common feature and only 6 per cent cases were subjects of high blood pressure. Myocardial degeneration and low blood pressure were found in about 9 per cent of cases.

Chronic bronchitis with emphysema, bronchiectasis and asthma were found to be common features in about 68 per cent of our cases.

Pre-operative Care

As will transpire from the above the majority in the series were advanced cases and required a carefully planned preoperative treatment to prepare them for radical operation.

Indwelling catheter drainage as a much advocated procedure has been of use in only a few cases. Its usefulness was limited in early type of cases but difficulty in the passage of catheter and complications as catheter fever, lowered urinary excretion and above all discomfort to patients causing non-co-operation has limited its use in our cases.

These unpleasant complications were safeguarded by:—

(*a*) Free urethral irrigation.
(*b*) Use of local anaesthetics.
(*c*) Use of rubber and gum elastic catheters against metal ones.
(*d*) Use of small-sized catheters.

Infected cases where there was evidence of chronic retention were suitable for this manœuvre and in all cases prepared for one stage operation. This was efficient pre-operative precaution to improve the patients' general condition.

In two cases the blood urea level fell down from 120 mgm. per cent to 70 mgm. per cent and from 90 mgm. per cent to 46 mgm. per cent respectively after catheter drainage of 48 hours.

In some of our cases the pyrexia was due to instrumentation and in others stirring of existing infection was responsible.

The advantage claimed is that besides drainage of the bladder it allows free drainage of the prostate and posterior urethra.

Prostatic hypertrophy is in most cases accompanied by infection. Indurated prostate may make one diagnose malignancy and it is only after free catheter drainage when this induration subsides that the real nature can be detected. 48 hours catheter drainage produced satisfactory results. Prolonged catheter drainage for over 48 hours was, however, employed in few cases with high blood urea and in them although urine was clear residual urine estimation was over 3 oz. Cases with lung complications are also fit subjects for prolonged drainage.

We have not freely employed tidal drainage owing to cumbresome nature of apparatus and difficulty in setting it, but in 4 cases where it was employed the results were satisfactory.

Fluid intake was encouraged with very satisfactory results both in preoperative and post-operative phases. This helps in producing diuresis which in combination with free drainage either by catheter or suprapubically is useful in minimising infection, lowering high blood urea level, improving functional capacity of the kidneys. Emaciation and toxæmia are promptly relieved.

Suprapubic cystostomy or first stage of classical Freyer's prostatectomy was done in 82 per cent of our cases and we have no reasons to grudge the usefulness of this procedure. In 4 per cent cases, suprapubic puncture with gradual decompression was done for cases of acute retention as emergency measure. After preliminary drainage of 7-10 oz. the catheter was spigotted and then every 2 hourly 6-8 oz. were drained.

Suprapubic drainage has in all our cases of chronic retention with elevated blood urea level and normal renal excretory capacity shown remarkable improvement.

Prolonged drainage was done in all doubtful cases to avoid the pitfall of sudden flaring of infection and total anuria a common feature in cases with even good renal functions. History of prolonged infection is given in four such cases and three of our cases showed this complication.

This fact has been emphasized to show that although blood urea reading and the value of information revealed by Mclean's urea concentration test is unquestionable yet the relationship of renal functional tests and operative prognosis is confusing, the deciding factor being infection. None of the above tests assess the damage wrought by infection.

Postoperative haemorrhage is commonly seen in cases where urine is cloudy and the residual urine is over 8 oz. Indwelling catheterisation in these cases is not helpful in relieving prostatic congestion which is suitably done by this method, and hence bleeding in two-stage operation is considerably less.

In all cases of hyperpiesis and where pulse rate is over 100 per minute and due to toxæmia, the procedure of preliminary suprapubic drainage is of use.

Delayed-action prostatectomy was done in border line cases with variety of complicating factors contra-indicating immediate second stage.

In our 7 cases dealt by this technique there were 2 cases with respiratory complications.

Two cases showed very slow renal functional recovery, but as the patient's general condition was improving with this method we postponed the second stage till 9 weeks.

In one other case there was ureteric calculus and hydronephrotic kidney and the shadow visualised in x-ray disappeared after three weeks of suprapubic cystostomy, the stone having been passed off.

In the remaining two cases there was depressed mental and physical state with arteriosclerosis and severe infection of the urinary tract.

Sulpha drugs have not given entire satisfaction in our cases and I do not advocate their use in strong terms as done by some urologists.

The question as to the optimum period for maintaining suprapubic drainage and correct time for the second stage operation is again a much disputed point in view of:—

(*i*) Uncertain resistance of individual to infection after operative interference, and (*ii*) in absence of infallible test for renal function specially in light of other factors as body build, state of the heart, and the lung and the mental condition. One is forced to rely on clinical experience.

If there is any evidence of even slightest clinical improvement we have strong reason to postpone the second stage. Interval of several weeks may be allowed if necessary to patients for recovery from damage due to chronic renal failure.

As mentioned, in majority of cases treated we have noticed maximal recovery of renal functions in about 3-4 weeks.

In 46 per cent of our series of cases prostatectomy was done although in 82 per cent of all cases preliminary suprapubic was done. Of these 36 per cent cases in which operation of prostatectomy could not be done, 16 per cent were those who showed lack of co-operation and were reluctant to undergo any further operative treatment after obtaining relief from their distressing symptoms. As soon as they could get sound sleep and rest, their mental state and physical condition improved and they appeared changed subjects. Suprapubic life was preferred by them to the risk of any subsequent operation. These patients were given necessary instructions and training to lead a comfortable suprapubic life and were instructed to report in any case, with difficulty.

9 per cent cases failed to recover or show any improvement in their condition, contrarily the condition

deteriorated and so made them unfit for any second stage operation.

The overall mortality by this technique was 12 per cent in our cases and this figure is not very discouraging when we look to the comparative statistics. Winsbury-White has reported an overall mortality of 9 per cent in best circumstances.

Epididymitis is a common sequela of infection in the bladder and posterior urethra, and in our cases 14 per cent showed this complication. Preliminary vasoligature was performed in the preoperative phase in all cases where history of prolonged or recurrent infection was present, and our results were satisfactory as can be judged by the relative rarity of this complication in the postoperative phase (only 3 per cent cases).

Cystourethroscopy was done in all cases where the nature of prostatic enlargement was clinically doubtful and such cases form 6 per cent of our record.

Forced fluid intake orally, by venoclysis and proctoclysis with minimal quantities of sulpha drug (1 gram six-hourly) has helped considerably in recovery of kidneys from damage due to infection and back pressure effects. Patients kept under penicillin therapy have responded erratically and its role in treatment of urinary tract infection is questionable. In my opinion all cases of gram-negative bacilli infection its usage is unwarranted. In mixed infections which formed about 76 per cent of our cases, the optimum concentration by 40,000 units four-hourly, in a patient's urine was about 186 units per c.c. and this was sufficient concentration to produce the desired effect. Baines has reported very good results by producing concentration of penicillin of about 170 to 256 units per c.c. and in his opinion this concentration can be achieved by giving 50,000 to 100,000 units of penicillin every eight hours. In his opinion the results have been uniformly satisfactory.

Role of streptomycin—useful in relieving temperature and pyuria.

Role of sulpha drug as a routine preoperative measure alone or in combination with penicillin has on the whole given us encouraging results and I feel that their judicious use to exterminate gross uro-sepsis together with free vesical drainage has much to commend. The opinion of urologists like Kenneth Walker and Stock is much against the routine use of sulpha drugs and in their view the procedure is dangerous. I think that a routine examination of blood to exclude leucopenia and a careful administration of these drugs with frequent W.B.C. count to check against this disaster of agranulocytosis will avoid any pitfalls.

Intravenous pyelography has an important role and is of great prognostic significance. In all our cases where chronic retention and back pressure effects were suspected due to poor renal functional tests we have not hesitated in doing this test to visualise the associated pathological state of the upper urinary tract.

In all cases where blood picture was suggestive of anæmia with low hæmoglobin, blood transfusion was arranged preoperatively. In other cases with low blood pressure and those in which blood loss was expected transfusion was arranged during the operation.

To promote diuresis in cases of renal failure and in those where hiccough was distressing sodium-sulphate solution 4·2 per cent (25 to 50 c.c.) intravenously was found efficacious.

Relative Evaluation of Prostatectomies by Various Techniques

It has not been my endeavour to fully describe the various techniques of prostatectomy in this paper and I feel that much time will be saved if instead of describing the operative techniques, commonly dealt in any standard text book of surgery, we confine ourselves to the comparative results obtained by various techniques followed in the series under review:—

I have tried to evaluate the success of each of these by adjudging the frequency of complications, relative morbidity and mortality, duration of hospital stay, and recovery of renal functions in each case.

The operation to be ideal should be in compass of any trained surgeon and not the exclusive monopoly of a handful and consists of complete removal of all existing and potentially obstructing tissues with minimal blood loss and shortest convalescence.

Suprapubic Two-Stage Prostatectomy by Freyer's Technique—75 per cent of our cases were treated by this method and the average interval between two operations was between 3 and 4 weeks. As observed this phase was allowed to the patient to recover his poor renal functional capacity, to treat uro-sepsis if any and improve his uræmic condition, and by judicious pre-operative measures to prepare him fully as fair or good surgical risk, from bad surgical risk. In 10 per cent cases with delayed-action prostatectomy the average period interval was 9 weeks.

(*i*) The mortality in our cases by this technique was about 14 per cent.

(*ii*) Average convalescent period after operation was five weeks.

(*iii*) Total period of stay in the hospital on the average was 8 weeks.

(*iv*) Uro-sepsis and wound sepsis were noted in only 5 per cent cases, a considerably low figure considering percentage of initially infected cases approaching us for treatment. Sulpha drugs and penicillin used judiciously have been helpful.

(*v*) Hæmorrhage—mild in 9 per cent cases, severe in 3 per cent cases, necessitating repeated blood transfusion. In one case we had to repeat four transfusions, totalling 1000 c.c. of blood.

(*vi*) In these cases we had only one case of acute uræmia which is a very insignificant number when compared with others. This much dreaded complication is more frequently reported with other techniques.

(*vii*) Incontinence was not seen in any of these cases.

(*viii*) Suprapubic fistula persisted in three cases for over 10-16 weeks, the cause being faulty suprapubic cystostomy in two cases.

(*ix*) Epididymitis was seen in only 3 per cent cases and preoperative vasoligature greatly avoided this common sequence.

(*x*) Paralytic ileus noticed in three cases but was fatal in one case only.

(*xi*) Pulmonary complications had relatively high incidence in our cases—14 per cent. 9 per cent of these were cases who developed bronchopneumonic and hypostatic lobar pneumonia secondary to previous lung infection. Postoperative mortality was high in these cases—8 per cent.

(xii) Postoperative prostatic obstruction was not observed in any case, and this is another point in favour of this technique.

Analysing the various causes of death in these cases the following data will be evident:—

(*a*) Ascending infection of the urinary tract—4 per cent.

(*b*) Respiratory complications—8 per cent.

(*c*) Paralytic ileus—one case.

(*d*) Renal failure—one case.

Considering our results by this easiest technique and the fact that postoperative mortality and morbidity are lower and dreaded complications of haemorrhage and acute renal failure being nil, this operation can be safely recommended for majority of cases of advanced type. It allows for adapting the patient and his renal tract to the hazard of prostatectomy.

The point against is the prolonged hospitalization of patients but this disadvantage is greatly outweighed by the safer convalescence and lower morbidity.

Little special training is required for its execution, the main prerequisites demanded being judgment as to its execution in proper time. In all cases of large hypertrophic prostate and adenomata the procedure has little difficulty, but in cases of fibrotic and calculous glands the procedure is certainly not ideal.

Aseptic Prostatectomy. One stage prostatectomy was done in only 7 cases and the technique followed was Freyer's transvesical route. Harris's operation was done only once and as the prostatic bed in infected cases does not form an ideal site for plastic suturing, we have abandoned this in favour of the original Freyer's method. Better risk cases were subjected to this procedure and the average hospitalization period was only four weeks.

Post-operative mortality was—2 cases *i.e.*, about 25 per cent. One case died of supression of urine and the other of respiratory complication. This high mortality figure is certainly not the proper index and unless we have collected records of some more cases and practised this technique more frequently no opinion on the percentage mortality can be expressed with authenticity.

Average blood loss greater than in two-stage operation—a point unfavourable to this technique.

End results in cases treated by this method have been satisfactory and so far no cases of post-operative prostatic obstruction have been observed.

Retro-pubic Prostatectomy. This new approach to prostatic surgery by Terrence Millin has been highly spoken of as a reasonably safe operation with easy convalescence and can be performed by any trained surgeon.

The bug-bear of contaminating the Cave of Retzius has been forsaken and deliberate procedure transgressing the territory of ill repute adopted. The originator has faced these criticism and in his opinion wide exposure allowing free drainage of this area is sufficient safeguard.

In total cystoprostatectomy wide exposure of this area is done with no unfavourable results; contrarily when a septic bladder is opened for drainage some of the septic contents escape into perivesical spaces either at the time of operation or by seeping into fat-bound retropubic spaces.

Fallacy of imperfect drainage of this region and the notoriously poor defence of the fatty tissue present in this region can be avoided by wide exposure performed during this operative approach.

Another favourable point of this technique is its simplicity and the fact that the haemorrhage from prostatic venous plexus and deep dorsal vein of penis is significantly avoided by careful forci-pressure. Only in cases of abnormal anatomy as aberrant obturator or internal pudendal artery we find some difficulty which can be avoided by proper exposure of the operative field. Wide exposure of the prostatic capsule allows the surgeon to deal with all the pathological conditions met with in the prostate gland and its contained urethra. The author has reported successful results in cases of fibrous, calculous, carcinomatous glands and various types of benign prostatic hypertrophy, *e.g.*, (1) lateral lobe enlargement, (2) posterior commisural hypertrophy, (3) median bar enlargement or sclerosis of the bladder neck, (4) subtrigonal or subcervical lobe hypertrophy.

The commonest variety of obstruction in small percentage of our cases examined lately have shown a trilobed enlargement.

The author has advocated a routine cystourethroscopy in every case to ascertain the prostatic enlargement and its precise nature. Unfortunately our patients subjected to this preoperative procedure have reacted badly and we have sad experience of many of our cases running away before any final treatment. The only solution that can be put forward to meet this is the conduction of this endoscopic examination under general anæsthesia immediately prior to operation, *i.e.*, on the operation table. In such cases our option to select the adequate technique for the particular case is decided only when the patient is in the operation theatre, and one should, therefore, be prepared to deal the case by suitable method having in readiness the

complete armamentarium for every type of approach. This is a great disadvantage and does not allow this procedure to be carried in every hospital.

At present we have only three cases treated by this method. The operative mortality was nil. The period of hospital stay was about three weeks.

Suprapubic leakage was present in two cases and required re-introduction of indwelling catheter. Irrigation of bladder through catheter is only necessary when there is no free drainage and there is evidence of clot retention.

Catheter drainage was kept for 3-4 days only, but in cases of leakage suprapubically was further replaced for 3 or 4 days more.

Early rising from bed, leg exercises and deep breathing exercises are useful. Sulphathiazole ½ gramme, 6-hourly and penicillin 1,00,000 units 8-hourly for 4-5 days was the routine followed in deference to the opinion of the author.

Routine postoperative dilatation of the urethral tract is not necessary and need be done in cases where the stream is not adequate.

PERINEAL PROSTATECTOMY. We have no cases treated by perineal or transurethral routes and our reasons are that although perineal prostatectomy in its modern form has been much commended by American clinics (where this approach was performed as a routine), disastrous sequelæ in the form of persistent or slow healing perineal and urethrorectal fistulæ, incontinence of urine are strong points against this route. Lowsley has reported postoperative stricture in a comparatively large number of cases and therefore the patient requires attention of the surgeon in postoperative phase over an indefinite and prolonged period. Sexual impotence is a well-known complication and summing up these disadvantages we have not risked our patients to this technique.

TRANSURETHRAL PROSTATECTOMY. It is an exceedingly difficult operation except in a very few hands and requires prolonged training and skill. When we consider the end results and complications of this approach, the inference is only one and this is that the labour and skill employed is not adequately rewarded. In cases of gross prostatic hypertrophy (common in our cases) the results are not lasting and have led to complications like sloughing of the resected glands due to poor blood supply of the area or to recurrence of obstruction due to continuance of the growth process. A very high incidence of postoperative urethral stricture has been reported.

CONCLUSIONS

Concluding our results we find that two-stage prostatectomy has given us very satisfactory results and notwithstanding the drawbacks of prolonged hospitalization, the procedure has good many advantages by way of minimal morbidity and mortality. It suits our patients well in the sense that most cases are those which seek treatment as a necessity in unavoidable circumstances when their agony becomes unbearable. In early and good surgical risk cases we advocate one-stage prostatectomy, and although we have only little experience of the latest approach by retropubic route this has given us satisfactory results, in comparison to aseptic prostatectomy of Hey.

No approach is similarly ideal in all type of cases and one has inspite of best laboratory and special investigation facilities to ultimately fall back on clinical acumen and experience to chalk out the ideal treatment for every individual case presenting myriad of pathological phenomenon. The deciding factors in chalking out the final treatment are body-build, state of heart and lung; mental outlook; correct impression of renal functional capacity; exact nature of prostatic hypertrophy and above all urosepsis.

DELAYED LABOUR*

(Passage)

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This world is a wonderful combination of trios. Beginning from the religious traditions, *viz.*, The Father, The Son and The Holy Ghost; Brahma, Bishnu and Maheswar, down up to certain aspects of Midwifery, namely, 1st stage, 2nd stage and 3rd stage of labour as also Power, Passage and Passenger, the same implication of trinity is prevalent.

In the process of labour I am to represent the passage through which the passenger, Dr. Tampan† will have to pass with the help of the dynamic power of Dr. Bagchi. Tampan is the prodigal child in the field of midwifery and it is my duty to forecast the difficulties that stand in his way while passing through me, I mean the passage.

Passage consists of the permanent bony pelvis padded by musculo-fascial structures and the temporary uterine canal which opens for the special occasion. Usually there is no obstruction in the passage except occasional blocks by a fibroid or an ovarian tumor, or a malignant growth of the cervix uteri or the contraction of the bony pelvis or when the passenger has a big head or when there is cephalo-pelvic disproportion which might be due to the fault of one or both of the last two items. The temporary uterine canal occasionally creates troubles by way of putting barricades of the nature of contraction rings; and at the

* Read at the Scientific Section of the Silver Jubilee Session of the All-India Medical Conference held at Calcutta, Dec. 1948.

† Dr. Tampan could not present himself as passenger. D. Karnade of Bombay took his place.

mouth of the canal, difficulties are often met with by the passenger, the so-called 'cervical dystocia'. This cervical dystocia may be either of the spasmodic nature (which comes under the category of power) or of the mechanical nature, which is due to cicatricial stricture resulting from the lacerated cervix in previous pregnancy or cauterisation of the cervix or from amputation of cervix. On many such occasions it is found that the cervix has been fully taken up but the external os is practically closed and represented by a dimple or a pinpoint opening. If neglected or overlooked, these cases might lead to bad cervical tear and the formation of a big haematoma at the base of the broad ligament. I have seen two fatal cases resulting from this type of cervical tear. Both the patients had previously undergone Fothergill's operation with amputation of the cervix. It is not very difficult to manage this mechanical type of cervical dystocia. A finger can easily be forced through the pin-hole point or through the dimple and later by slow manual dilatation the external os can be fully dilated. If there is much resistance, a crucial incision of the undilated os, will make the path open, which will later on be stitched up. In connection with the cervix, we experience another group of obstinate cases, the so-called 'curtain cervix' group. It taxes the patience and ingenuity of the obstetrician. I believe this question will be taken up along with anomalies of power in delayed labour.

Real difficulties are experienced in connection with the bony pelvis. It is a long story though very important from the point of view of delayed labour. I shall touch only a few important details. From the very beginning of our knowledge in midwifery, say 2nd century A.D. uptil now, no part of obstetric science has been so badly misunderstood and so grossly misinterpreted as the bony pelvis. The great Hippocrates taught that the pelvis is an elastic ring and that the symphysis pubis opens to make room for the child to pass through. This doctrine prevailed for more than 1500 years upto the beginning of the 18th century, thus nullifying the conception that dystocia may be due to contracted pelvis. Naturally the question of pelvic mensuration did not arise. Deventer, a Dutchman, was the first to give accurate description of pelvis in 1701 (i.e. about 1500 years after the Hippocratic doctrine was established). He emphasised that contraction of pelvis is a cause of dystocia. Later, G. M. dela Motte, a village practitioner of France, first declared the fact that contraction of the size of the inlet is the most frequent cause of prolonged and difficult labour. Then came all sorts of pelvimetry both external and internal, including the measurement of diagonal conjugate first enunciated by William Smellie. Hundreds of instruments were invented for internal pelvimetry. Fortunately they have all become obsolete now. External pelvimetry was introduced by Bandeloeque about 150 years ago and is still prevalent to measure the interspinous, the intercristal and particularly the external conjugate diameters. These diameters are supposed to give us an idea of the inlet of the pelvis. Recent works on x-ray pelvimetry have definitely shown that external pelvic diameters are mostly misleading and that very seldom a true picture of pelvic inlet can be had from external pelvimetry. To substantiate this statement, I would like to refer to recent works done on this subject by Moloy, Caldwell, Thoms, Greulich, Dippel and others. For example, the external conjugate is supposed to give us the idea of the true conjugate (conjugate vera) by deducting 3 inches from it. Dippel by x-ray pelvimetry shows that this is far from the truth. There are marked variations from 2 inches to even 5 inches between the external conjugate and the true conjugate of the pelvis. Many tragic incidences have happened, many unnecessary Caesarean sections have been performed because of the erroneous decision taken by simply measuring the external conjugate. We have done a series of x-ray pelvimetry and our findings correspond with those of Dippel. More fallacious is the conclusion drawn from the measurement of the interspinous and the intercristal diameters. They are supposed to give us an idea whether the said pelvis is a generally contracted pelvis or a flat pelvis. The conclusions drawn from these diameters do not correspond with the actual type of the pelvis. Moreover the conception of the bony pelvis has been entirely revolutionised by the recent radiological study of the pelvis. The modern conception is to classify bony pelvis as dolichopellic, mesatipellic and brachiopellic or platypellic types according as the anteroposterior diameter of the inlet is longer, equal or shorter than the transverse diameter. X-ray pelvimetry not only gives us a true picture of the bony pelvis, but actually signifies which of these varieties will create more troubles. As for instance, difficult labours are found more common with the brachiopellic type and least with the mesatipellic. In short, the method of diagnosing the type of the pelvis and the actual mensuration of the diameter of the inlet should be done by the x-ray pelvimetry if accurate forecasting has got any value in dealing with dystocia due to bony pelvis. The external pelvimetry has done its job and it is high time that this legacy of errors which has been handed down from generation to generation for the last 150 years should be relegated to the past. It is a sheer waste of time and energy to stick to this fallacious teaching. Errors when once detected are sure to be eliminated to-day or to-morrow. The American obstetricians have already taken the lead and we know from Dr. Eastman, Professor of Obstetrics, John Hopkins Hospital that Dr. Greenhill is going to eliminate external pelvimetry from the next edition of De Lee's Text Book of Midwifery. In case x-ray pelvimetry is not possible, we get better information from the clinical estimation of cephalopelvic disproportion by Munro-Kerr's method.

It is our experience that by giving a fairly good trial labour many of the borderline cases terminate successfully either naturally or with the least obstetric interference. The incidence of caesarean section has thus been reduced to a minimum. I have qualified trial labour by saying 'fairly good' trial labour. The implication is that real connotation of trial labour is still vague and there is a good deal of individual variation. My experience is that trial labour will not have its full display until at least a few hours have

elapsed after the full dilatation of os and rupture of the membranes. Very often I have noticed cases where the uterus has apparently behaved in a refractory way until it gathered strength and pushed the child through a seemingly contracted borderline type of pelvis.

It has also been our experience that cases that have been prepared for caesarean section for cephalopelvic disproportion but the operation delayed for a little while, came off naturally. Of course this does not mean that one should wait indefinitely. Provided sufficient time is allowed and the head does not engage, it will definitely be a clear case for caesarean section for which operation theatre ought to be kept previously ready. Some of my colleagues might be interested to know the management of such cases in rural areas. My only advice is to wait. Inspite of all our judgment to the contrary, the child sometimes is born naturally. If not, perforate the head and extract.

Sometimes difficulties arise when there is contraction at the outlet which can be easily measured. Our experience is that when the T.D.O. (transverse diameter of the outlet) is between 3¼" and 4" there may be protracted labour but difficulties are not unsurmountable. But when the T.D.O. is less than 3¼" or the combined T.D.O. and posterior sagittal diameter is less than 6", there will be a corresponding contraction of the diameter of the inlet giving a typical picture of android type or funnel-shaped pelvis. The head might be engaged in an exaggerated flexed attitude or there might be mid-pelvic arrest. Confinement in these cases is extremely difficult. Usually the child is extracted with forceps application which is invariably difficult, damaging not only the child but the mother as well. There may be deep lacerations of the pelvic floor often extending up to the bony wall. I have seen cases where there have been avulsions of symphysis pubis as a result of tremendous force applied during forceps application. The best thing under the circumstances *i.e.*, where the head is very tightly fixed in the mid-pelvis without any progress for long hours and where the question of caesarean section was not thought of or planned previously and where it is not an easy case of forceps, would be to sacrifice the child. It will save the mother from severe and sometimes irreparable damage and give the obstetrician a chance to deal with the future labour more profitably.

Next I would like to take up a special type of difficult cases where the passage is not very much contracted but the pelvic bones are thick and the hip is quite bulky. The patient is short in stature, thickly built, short necked and well padded with adipose tissue. This type of patient is classified under the term "dystocia dystrophia syndrome" and often overlooked by general practitioners and young obstetricians. The labour is distressing from the very onset with the non-engagement of the head and early rupture of the membranes. With patience, sedatives and watchful care, the case may be terminated favourably but occasionally and specially if it is a borderline case, the head remains high up when the only commendable line of treatment would be caesarean section. Such type of patients are often sent to the hospital rather at a late stage when the attempts of the local doctor have been baffled, mother tired and there is a flicker of life in the child. I had a very sad experience with one of such type of cases in my younger days. It was a case of failed forceps tried outside. I did the caesarean section but lost the child and the mother. I am sure some of my colleagues may have similar experience. When I told late Sir Kedarnath Das about this incidence, he consoled me by telling me an incident of his life (of course, not of his younger days). He had a similar case. The House Surgeon informed him that a case of failed forceps had just been admitted, the mother exhausted but the child still living and everything ready in the operation theatre for immediate caesarean section. Sir Kedarnath told him that he would be coming presently. Half-an-hour was over and the house surgeon rang up. The answer was that he was coming presently. Another half-an-hour was over: the house surgeon got naturally impatient and restless; he rang Sir Kedarnath again. This time he got a stiff answer from him: Don't be fidgety: I am coming presently." Sir Kedarnath reached the hospital giving a safe interval of about 2 hours from the time of first information calculating within himself that the flicker of life that was still existent in the child would be still less or non-existent. On examining the patient, he said that as there was no foetal heart sound, there was no question of caesarean section. A simple perforation of the child was all that was required and the mother had an uneventful recovery. This story of Dr. Das's life tells an untold important chapter of delayed labour. We all know by this time that in cases of serious difficulties where both the mother and child cannot be saved, the child will have to be sacrificed to save the mother. Time will not permit me to discuss other varieties of bony pelvis causing distortion in the passage. I would like to conclude by briefly mentioning about the triradiate pelvis due to osteomalacia, a condition quite common in Northern India but comparatively rare in Bengal. In its extreme degree the passage will be blocked like anything necessitating caesarean section. I had a very interesting experience in one case of this type of extreme degree contraction with full time pregnancy. The patient could not even lie properly. When I told her that caesarean section was the only way of delivering the child, she gave me a sarcastic smile. Everything was kept ready for section at home and the attending physician was instructed to inform us as soon as the pains start. To our great surprise the confinement was so sudden and natural that we did not get a chance of even unfolding our armamentarium. Evidently the pelvic bones became very soft due to decalcification and yielded to the pressure caused by strong contractions. I believe there has not been much delay in delivering goods of the present symposium as the passenger is a small child and the passage although an elderly android not of primiparous type and the power though olderly still possesses great potential power.

STREPTOMYCIN SENSITIVITY

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Like the sulpha drugs antibiotics give not infrequently sensitivity. Local use of sulpha drugs in dermatological practice has been completely stopped in Great Britain due to its toxicity. The innumerable toxic manifestations of penicillin are well known to all medical practitioners all over the world now. Streptomycin has been recently introduced in some parts of the world and particularly in India where due to dearth of the antibiotic it has been used in a very limited number of cases. Even with its limited use I had the opportunity of treating one case of streptomycin sensitivity at Patna and two cases at Calcutta during 1948-49. During my stay for six months in Great Britain where I had the opportunity of working in the dermatological departments of the Royal Hospital for sick children; Western Infirmary, Royal Infirmary, Glasgow and the Southern General Hospital in Glasgow I had an opportunity to see a fairly good number of streptomycin-sensitive cases being treated in the skin clinics.

Clinical Reports

Case 1—Male 32, medical practitioner in Bihar, came to me in 1948 with an erythematous eruption of the right index and right middle fingers and right thumb, pompholyx-like eruption of the fingers and palm of the left hand. These eruptions were itchy and came out after he had given injections to the patients for 3 consecutive days. 40 days before this he gave injection of streptomycin for about a month to another case. Individual sensitivity was demonstrated by a strongly positive patch test. I treated him with an anti-histamine drug for one week and locally he had 1 per cent ichthyol soaks for 3 days followed by zinc paste. He was cured. He was advised not to handle the drug again.

Case 2—Female 41, in Calcutta in 1948, who developed urticaria while her child was getting streptomycin injections. She was in great distress when I saw her with urticaria all over her body with intense pruritus. Patch test was positive for streptomycin and the use of antihistamine drugs cured her completely in 10 days.

Case 3—A child 6 years old, was getting streptomycin for tuberculous meningitis in early 1949 and was doing well when 3 days after completion of the treatment acute vesiculo-erythematous eruptions appeared on flexion surfaces.

Antihistamine drugs cured the condition.

Discussion

There are various types of streptomycin toxic eruptios such as: (1) dermatitis venenata; (2) maculopapular erythematous rash; (3) pruritic and self limited; (4) urticarial; (5) exfoliative; (6) stomatitis. These toxic eruptions are rare when the total daily dose is 16 gm. or less (Cohen and Glinsky, 1949). Tompsett (1948) has advocated the importance to use as small a dose as possible, because of the toxic effects of streptomycin on the vestibular apparatus. Steiner and Fishburn (1947) reported cutaneous eruptions from streptomycin in 18·2 per cent of cases and eosinophilia in 22 per cent of cases. Johnson and Davis (1949) reported a case of acute dermatitis venenata of the hands and the eyes of a nurse who had administered solutions of the drug for six months before any real cutaneous sensitivity appeared. Toxic erythema due to streptomycin has been observed by Harrel and Nichols (1945). Flushing, urticaria, erythema nodosa, pruritus, conjunctivitis, exfoliative dermatitis, maculopapular and hæmorrhagic cutaneous eruptions and dermatitis venenata were noted in workers manufacturing this antibiotic (Nicholas & Harrel, 1946). Erythema, heat, pain and burning at the site of injection and regional adenites were observed by Madigan and his associates (1947). Benham and Cholal (1948) have found that prolonged administration of streptomycin sometime leads to agranulocytosis with anæmia and thrombocytopaenia. They have found anæmia developing after oral administration of streptomycin and think that it is due to its action on gram-negative intestinal flora interfering with the synthesis of folic acid. Eosinophilia, although sometimes observed, is not of any consequence.

Conclusion

Various sensitive reactivity have been observed with streptomycin therapy. Medical personelle should use gloves to handle streptomycin. A patch test is helpful before starting prolonged streptomycin therapy. Antihistamine drugs (Benadryl, Antistin and Anthisan) are very helpful. Therapy should always be done under supervision of qualified medical practitioner.

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SPECIAL ARTICLES

I

ANTITUBERCULOSIS WORK IN SCANDINAVIA*

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Scandinavian countries are now prominent in the minds of all tuberculosis workers because of their outstanding work on B.C.G. vaccination. It was mainly with the idea of gaining some first hand experience in connection with B.C.G. work that I visited Denmark, Norway and Sweden last year. I however, found that besides B.C.G. vaccination, the general antituberculosis work in these countries is so well organised and so comprehensive that it may very well serve as a model for any country.

The problems relating to tuberculosis are so vast and many-sided that it is no longer possible, nor desirable to restrict antituberculosis work amongst specialists alone. My object in speaking to you here today is to make as many of the medical men as possible interested in antituberculosis work.

Towards the end of the last century the tuberculosis mortality rate in the Scandinavian countries was maintaining as high, more or less, constant level. But since the inception of preventive measures in the beginning of this century, there is a steady fall in the death rate.

The most important antituberculosis work is done in these countries through tuberculosis dispensaries. The entire country is divided into dispensary districts. In each district there is a central dispensary with all modern equipment, such as x-rays, both for large film radiography and miniature fluorography, and bacteriological laboratory. The dispensary is in charge of a Tuberculosis Officer who is responsible for the organisation of antituberculosis work in the entire district. Each and every case of tuberculosis patient is notified and registered in the central dispensary. The dispensaries are both diagnostic and preventive in function. Any person residing in the district has a right to get himself examined by the dispensary free of any cost. People living at a distance from the dispensaries are paid travelling expenses to attend the dispensary if they are of limited means.

There are also a large number of tuberculosis hospitals and sanatoria distributed all over the country, each serving particular areas. When a person is found to be suffering from tuberculosis as a result of examination in a dispensary or by mass radiographic survey, he is sent to a tuberculosis hospital first for the assessment of the severity of his disease and to determine as to what form of treatment, if any, is required for him. According to this assessment he is either sent to a sanatorium or kept in the hospital, or sent home.

The number of beds available for this initial period of observation and final treatment are quite sufficient for all cases detected. In Sweden in 1945 there were 10,000 beds available for a total population of 6½ million with a total annual tuberculosis mortality of about 4,000, that is about 2·5 beds for each death. In Denmark in 1928 the tuberculosis mortality was 7·5 per 10,000, and the number of beds available were 10·1 per 10,000, that is about 1·5 per death. The condition has further improved since then, because the mortality has gone down to below 4 per 10,000 and number of beds have increased. It is evident therefore that ambulatory or domiciliary treatment for the newly diagnosed cases need not be necessary. The dispensaries are thus able to concentrate more on case-finding and preventive work. Follow up and observation of arrested or healed cases are done in the dispensaries. All cases notified, are kept in the register for 3 years after all signs of activity have ceased, in the cases of hilar adenitis, erythema nodosum, pleurisy and extra-thoracic tuberculosis, and five years in cases of pulmonary tuberculosis.

On the preventive side, each dispensary has a number of district nurses. They are each alloted an area of about 3,000 population. When a new case is detected, the nurse in charge of the locality from which the patient comes is informed. She visits the home, finds out the living condition of the family, investigates about financial condition and brings the contacts for examination. She also recommends as to what aids if any, are required for the family. If home conditions are found unhygienic, better house may be arranged through the municipal or similar authorities. If children are found undernourished or insufficiently clothed, suitable grants are made for their improvement. If it is found impossible to arrange for improvement at home, children are taken care of by the authorities and sent to preventoria for maintenance.

There are also school nurses attached to dispensaries. They look after the health of school children. In Sweden there are also special students dispensaries attached to universities. These are used for mass health survey of students, mass radiography and B.C.G. vaccination.

B.C.G. Vaccination

B.C.G. vaccination now occupies a very important position in the anti-tuberculosis campaign in Scandinavia. In Sweden it is estimated that upto the end of 1946, 500,000 people were vaccinated at least once. Annually about 1,50,000 to 2,00,000 persons are vaccinated, including the newborn infant. Considering that only the tuberculin-negative persons are vaccinated, it is expected that in a short time the entire population will be vaccinated once. In Denmark all negative reactors in the army have been vaccinated. Until recently only tuberculosis contacts and persons exposed to risks of infection and children of school-leaving age were vaccinated. But recently all children of school age and all negative reactors in the age group 15-35 are being vaccinated.

* Read at the Sivler Jubilee Session of All-India Medical Conference held at Calcutta, December, 1948.

Vaccination in Denmark is entirely voluntary, but it is seldom refused. In Sweden it is compulsory for certain groups of people, who are exposed to risk of infection, such as medical students and probationary nurses, public dental service and public asylums. In Norway however since the beginning of this year it has been made compulsory for all tuberculin-negative persons.

Mass Miniature Radiography

In the central dispensaries mass radiography of certain groups of people is undertaken besides the ordinary dispensary work. Factory workers and students are the first priority. Military recruits are also examined in special centres. In Norway and Sweden, I saw some mobile units working in outlying centres and also in different localities in the cities and suburbs, so as to get at the domestic employees, shop assistants, housewives, etc. In certain areas with high tuberculosis mortality, survey of the total population has also been made in Sweden. In such surveys, a 100 per cent response has been obtained through voluntary efforts alone. It has been estimated that about 3 persons in every 1000 examined are found to have active tuberculosis requiring special treatment.

Industrial Medicine: Its Religious, Social and Economic Help

In these countries as in all other advanced countries provision has been made so that any person of whatever means, can obtain adequate treatment free of all costs. Extensive social security schemes such as sick benefit clubs, health insurance, etc., protect the tuberculosis patients and their families from economic ruin.

Organisation and Finance

Most of the anti-tuberculosis work started at the initiative of the National Associations for prevention of tuberculosis in those countries. They started the campaign by propaganda and education regarding preventive measures. Gradually sanatoria and dispensaries grew up, and legislature to help in enforcing the measures was enacted.

At present the primary responsibility of arranging for the diagnosis and treatment of the tuberculous lies with the local authorities such as the country councils, municipality or similar bodies. They enjoy Government subsidies for the establishment of sanatoria, or dispensaries. The expenses are also partly borne by the state and partly by sick benefit clubs or insurance or by the local bodies. In Denmark the state pays ¾ of the statutory charges for the treatment of all patients and the rest ¼ is from elsewhere. In Sweden also the state pays about ⅔ and the local authorities pay the rest.

The National Associations are now functioning as advisory bodies and research organisations. They arrange for trials of new methods, collect data and recommend their adoption to the Government of local authorities. Their funds are mainly raised by public charities or subscriptions.

Legislature

In all these countries legislative acts have been in force, laying down the basis for organisation of anti-tuberculosis work.

In Denmark, the Tuberculosis Act provides for grants so that all patients can receive treatment irrespective of their capacity to pay. Other provisions are compulsory notification, compulsory medical examination for the presence of active tuberculosis in all persons employed in the care of children, such as wet-nurses, employees of day nurseries, childrens homes, school teachers. In public services if a person is found suffering from infectious tuberculosis, he is discharged with ⅔rds of his salary as pension.

In Sweden and Norway also similar acts exist. In Sweden, any person suffering from infectious tuberculosis is obliged to go to a special hospital for the protection of neighbours. Persons suspected of suffering form tuberculosis or in contact with a patient can be forced to submit to an examination.

Compulsory B.C.G. vaccination for all tuberculin-negative persons in Norway has already been mentioned.

II

INDUSTRIAL MEDICINE: ITS RELIGIOUS ASPECT— OTHER SIDE OF THE MEDAL

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Ahmedabad

In the May issue of the Journal of the Indian Medical Association I read with unabating interest an article by Dr. H. P. Dastur, L.M. & S. (BOM.), Medical Officer of Industrial Medicine Department of Tata Industries Limited, Bombay. As a medical practitioner in the working men's area of Ahmedabad, I was especially looking forward to some information dealing with industrial medicine, as developed and practised by employers, corporations and Government. But the article contains nothing directly connected with the clinical aspects or experiments conducted in this direction, or important observations made by Dr. Dastur's deparment in Bombay.

Covering a variety of subjects, Dr. Dastur's contentions boil down to the following main points. Failure of science as against religious methods is the bane of present day society, "suffering from a hedonistic approach to life'. This failure is ably seen and removed by late Mahatma Gandhijee's experiments made at Ahmedabad in the labour field, where, "a rotting mass is picked up by him and remodelled in a shapely cast of human dignity". The doctor empha-

sises the need for, "spiritual freedom." He says, "The industrial physician's panacea for increasing production is freedom from illness, but there is one freedom which covers all freedoms, freedom from self..... Absence of illness is not positive health, what is needed is Alchemy of nursing and importing divinity within one's own self. "What is needed is 'humanising of the system', 'fusion of science and religion, co-operation and not conflict'". It is hopeful signs of the times according to Dr. Dastur that the manufacturers are learning to understand the moods of workers. "What is needed most is integration of mind freed from hedonism and practice of Karma and Bhaktiyoga in life." "Return to religion" should be our watchword and the author ends his article with this advice to medical science.

This article is a challenge to all scientific thinking, experiments and perspectives. Medical profession should seriously discuss this, because it comes from one of its members, who is connected with the largest industrial organisation of India, not yet known to have evolved a benevolent system for its workmen.

Dr. Dastur wants us to believe, "That the only freedom which a man needs of all freedoms is freedom from self." I beg to differ, by pointing out, that in the limited field where I work, I find that an ordinary man is more and more granted one freedom that is freedom from living, and nobody bars his way to that final end. All industrial medicines, literature and plans with their emphasis on researches of group psychology, "coloring machines to create psychologically benevolent atmosphere," serve only the ends of industry and its profits and not unfortunately the physical and mental "integration of workmen". This is not the place to go into the economic life of a workman's life, as it is patently known that all experiments made by subjective philosophers or labour institution have not removed their ills. The present society finds itself deeply stuck in a malaise of conflicts and exacerbations of mental and physical illness of workmen and the poor instead of alleviation from diseases and want.

Dr. Dastur has relied upon mistaken diagnosis of the present diseased condition of the society. He blames the hedonistic approach to life as the root cause of the diseases and cites, 'Failure of objective experimental science' in support of his contention and boldly claims that a sort of a new heaven is created for Ahmedabad workers by the Textile Association which followed religious philosophy of life as preached by Mahatmajee.

What is the nodal problem before medical science or as before any science? It is achieving freedom from want, insecurity and disease. If economic science is a science of material well being, medical science provides the whereabouts to protect and preserve that well being. So the pursuit of well being is natural to man and it is *sine qua* of all persuits of man including spiritual happiness. Therefore, without material prosperity no inner peace can be achieved. I would maintain that leave alone material prosperity, what is urgently needed today is securing elementary creature comforts to human beings and assist them and their families to so achieve their health as to succeed in resisting diseases and prevalent epidemics which claim millions of our poor countrymen as their victims every year.

These victims of death and disease die not because they suffer from a 'hedonistic approach' to life nor because a 'religious approach to life' is wanting among them. The grim reality is that they lack the wherewithals to even approach a mile near satisfaction of their basic needs of life. They are soaked with religious mindedness and an overdose of it has permanently sunk them in a coma of ignorance. To all the disorders of their mind and body they maintain a pessimistic attitude which reflects the mental paralysis they suffer under and which is a scathing indictment of the leaders of the society and medical profession.

In the postfreedom era a plethora of slogans has found the way in every field of social activity. Such slogans, 'inner peace', 'fusion of science and religion', 'spiritual freedom', have also wormed their way in fields of science. To achieve a mechanical fusion of the so-called 'material west' and 'spiritual east' and thereby to prove our great national contribution to the world sinking under materialist decay is wrong. But these so-called panaceas can hardly stand test of truthful data or rational thinking.

Ahmedabad is case in point. As a medical practitioner in the working men's area for the last four years I observed very closely the lives and illnesses of poor workmen, their wives and children. The starkest fact facing one is that of degrading poverty and death of thousands every year due to malaria and other industrial diseases; let alone the growing prevalence of tuberculosis which claims heavy toll of ten thousand victims every year. I have come across scores of open cases of pulmonary tuberculosis of poor people who have to wander about and face slow death, infecting other members of the family, because there is limited accommodation in the civil hospital which admits such cases whereas other hospitals do not admit such cases at all. The only venereal clinic has been abolished since two years and incidence of venereal diseases is mounting in workmen's area. The disease is allowed to grow unchecked as the victims cannot afford to take arduous and costly treatment in private clinics. The Textile Labour Association which has lacs of rupees of reserved funds boasts of a very ordinary maternity hospital with a few beds for thousands of workers' women. Such a big industrial city with textiles workers' population of one lac thirty thousand has not yet organised a single child welfare centre for their three lacs children.

The ghastly and wretched slums which breed malaria germs every year and take a heavy toll of money, life and energy of workmen are not yet

abolished even to a very little extent, despite the existence of first class municipality, Textile Association and other progress which our city boasts of. Therefore to maintain that 'Ahmedabad workers are remodelled in a shapely cast and given an inner peace if not prosperity', is a height of unscientific understanding and entirely an incorrect statement of facts.

Because Dr. Dastur's main contention that 'subjective religious philosophy of life' has attained this wonder, is the basis of the whole article, I am constrained to offer my rather frank comments on the unhappy situation here. The other day a labour inspector of the Textile Labour Association whose wife was my patient was talking to me on the achievements of the Association for labour. During the talk he mentioned just passingly that Textile Labour Association grants commission in cash to workmen for enrolling members of the Association. Such grants by commission cost Rs. 34,000 in an annual budget of Rupees two and half lacs. I was rather shocked to hear of a voluntary institution offering cash for collection of subscription. This reminded me of Dr. Dastur's article which applauded so much spiritual values attained by Ahmedabad workers under religious philosophic experiments.

To me as to every man and woman with rational thinking this should appear as high piece of degradation workers are thrown into when it is cash nexus which binds them to an organisation. Thus an average Ahmedabad worker is unfortunately not 'imbued with more of spiritual idealism' as Dr. Dastur so painfully tried to picture before us. He is of the same mould as his fellow brother in India, and he can be of no other mould too, under the present situation.

Because the real causes of the malaise are not to be found in the so-called over-materialism of man, but they should be sought in underfeeding slums, lack of adequate medical protection, provision for social insurance for the poor working men. To offer spiritual freedom when he is miles away from economic freedom is putting the cart before a horse. These high sounding words, 'inner peace', 'religious harmony', 'practice of Karma and Bhaktiyoga', convey nothing to the common man and perhaps to those who use them often have yet to find a common interpretation and usage. Religion if it means a way of life advocating and practice of justice and love to fellowmen, brotherly human feelings, co-operation, then none can hold any objection. To men and women of the medical profession it should be clear as day light that man is the most valuable part of creation and that part has to be repaired, recast and made invulnerable to all the inroads of disease. To this end, the so-called 'spiritual freedom' 'can't contribute anything, except as an escapedoor from crowding problems and unpleasant realities of life. Scientific investigations, tests and approach to life, are the only criteria to judge man's progress, and there alone lies our material and therefore 'spiritual' salvation. That alone can build up the health of our society, which is so much under a spell of religious toxæmia administered by our system for hundreds of years. We can't look backwards, because we have to face overwhelming problems.

Therefore the formulas 'fusion of science and religion', 'supplementing industrial medicine with religion' are not valid. Religion is based on faith and beliefs not put to scientific tests and it claims immunity from them. Religion and science cannot be put on the same plane nor can there be any question of supplementing each other. Very overwhelming opinion of scientists throughout the world holds that religion and science are as apart and different as darkness and light, as faith in the non-existing and persuit of knowledge.

I agree with Dr. Dastur that the present dehumanising system should be shown of its degrading aspects. But this is a far cry yet. Some experiments are made, but how colosally inadequate and fruitless are these experiments when we see that the forces of disease and evil augment their breed in geometrical progression whereas those of inner mental peace are tragically ineffective.

I am not trying to underrate the possible value of such efforts but I am only placing a problem which is not solved. It is worsening not because scientific experiments have failed. I do not agree with Dr. Dastur where he maintains that 'heroic efforts are made by medical men to solve them'? We should boldly admit that sunk in our own selfish pursuit we have hardly attended them. As shown in the course of this article Mahatmajee's city has got the least benefit of his profession, service to the poor has remained a meaningless shibboleth, and whatever is done is perhaps creating a complacence of achieving a marvel.

To recast human beings let their bodies and surroundings be remoulded. Let them not be made to live under an infernal fire of starvation, insecurity of employment, scarcity, housing shortage, and wretched condition of life. It may be argued that this suggested solution is aiming at a basic change in the social system. Yes, that is where science leads to if it wants to remain true to its noble traditions.

Therefore to reconstruct our society let us not seek for spiritual deficiency among the crores of society. Their hearts are sounder than we can ever dream of. Let us not look upon them as objects of our experiments. An abandonment of our paternal attitude of their vices and opening of all channels of knowledge to them is the most paramount need. If we make them sound in body and therefore in mind, then alone more food will grow in our country, more cloth and necessities of life will be produced, and millions of children will bask in sunshine of new happiness. If we fail to achieve this, thousand plans of 'coloring of machines' or 'manufacturers understanding of workmen's moods' will miserably collapse resulting in further deterioration of the situation, which demands an urgent cure. It is the duty of I.M.A. to come forward with a plan to assist Government to fight disease and health.

III

RURAL MEDICAL RELIEF

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The rural population of the country has been variously estimated as between 75-90 per cent of the population; so the urgent need of efficient medical services for them is obvious. I will however, very briefly state certain facts which will give an idea of the immensity and urgency of the problem.

Individual sickness is a cost levied in some way or other upon the society at large. The working efficiency of the Indian worker is practically 50 per cent that of the workers of other nations. This is mainly due to malnutrition and effect of chronic disease like malaria, hook-worm etc., most of which are preventable.

The ultimate effect of ill health arising from malnutrition and disease is inefficiency so far as the labour is concerned. The vicious circle of disease, inefficiency and poverty goes on and on. In our present food situation, it is essential that we must keep the land-worker in a fit condition, otherwise no amount of tractor or fertiliser will be able to produce the required amount of food.

Considering the amount of poverty, sickness and difficulty of procuring the right type of medical aid, a sound organisation of medical relief is more imperative in rural areas than in urban places.

Rural villages have a higher percentage of women, children and the aged, and a comparatively smaller proportion of adult population has to support an exceedingly large proportion of children and the aged. Migration of the young people to the city means a distinct loss to the productive power, and it is the more capable and enterprising person who leaves the village for the city—so there is loss not only for quantity but of quality as well.

The All-India Institute of Hygiene carried out a survey in Singur, a rural area near Calcutta about the health and economic conditions of the people, in 1946. Their findings are most interesting and instructive.

The total area under survey was 32·98 square miles, with a population of 63,000. 38 per cent of the people were sick at least once a year. 12 per cent of the population was unwell at any one time, and 18·4 days per head of the population was lost through sickness, in a year. Annually 2,33,620 man days were lost through sickness costing an annual loss of four lacs of rupees. If this be the loss in a small area, you may well imagine the colossal loss caused to the nation through preventable sickness.

In this area the average per capita income was Rs. 165 a year, of which Rs. 148 went for food. 1·5 per cent of the total expenditure was spent on medical care. The people in the area spent Rs. 2-8-0 per capita for medical care and the state and local bodies together As. 2-6. So the total per capita medical expenditure including preventive measures was Rs. 2-10-6.

The poor are in greater need and receive less medical services; and as a whole the rural people contribute more to the coffers of the state. In all recent schemes of medical care, the rural people have received the least consideration.

Before the introduction of the National Health Services, Great Britain was spending 22·7 per cent of national revenue in medical care. The National Health Service is costing the nation 352 m.. pounds a year. The Health Department budget used to be only 8·4 per cent of the revenue, which has now been cut down to 2 per cent. The more serious anomaly in expenditure on medical services arises from the fact that a major part of the benefit goes to the urban people, though it is the rural masses that pay. No doubt some of the benefits of urban institutions are enjoyed by the rural people as well.

The city of Madras with less than 15 per cent of the total population of the provinces gets nearly 33 per cent of the amount spent. Bombay city with a population of 15 lacs received 14 lacs, while 193 lacs in the villages had to be content with 11 lacs. In Bengal out of 26 lacs, 20 lacs were spent on hospitals and dispensaries in Calcutta alone.

Difficulties

In spite of our progress in medicine, we are still carrying a heavy burden of sickness and most of our rural population get no medical care. The chief deterrent to efficient medical care in rural areas is the low purchasing power, and consequent economic barrier between the patient and the doctor. Rural deficiencies in health resources and medical care stem almost entirely from economic roots. If the farmer and the villager could pay for all the care they need, the physician and the hospital would be there to serve, the patient would be cared for, and rural medicine would not be a problem to-day. The serious disadvantage of the families looking mainly to the soil for their livelihood is seen in the remarkable fact that the net per capita income of all persons are far less than would be required to have any medical service.

Organised measures must be taken to mobilise the financial resources of the population in order that medical care may be purchased on easier basis. Before exploring any specific approaches, let us remind ourselves of a few facts regarding rural income and the medical purchasing power of the rural families.

The income of nearly all the people in rural areas is from agriculture, and agriculture in India is a deficit economy. The income per worker in the services has been estimated to be Rs. 307, in industry Rs. 197 and in agriculture Rs. 133.

	Income per worker	*Income per capita*
Urban ..	Rs. 426	Rs. 162
Rural ..	Rs. 135	Rs. 48

Increasing pressure of population on the land led to emergence of a class of landless labourers. The

agricultural labourers are not only unemployed for a considerable part of the year, but the wages paid during the period of employment are very low. He gets only two-thirds of the income necessary for subsistence even on a low standard. The close relationship between per capita income and public health is too obvious to need explanation.

Food, shelter and clothes are the three primary necessities of life. It is only after fulfilling these demands that one can go, for health and cultural requirements.

In all places rural or urban, medical expenditures vary with the family income, although illness and death strike with rates in the opposite direction. So under the present circumstances medical services bear very little, if any, relation to the health needs.

Modern medical service is a purchaseable commodity. The purchasing power of the average villager is so low that he cannot even buy the very minimum amount of medical service that is essential for him. The available funds that the average villager can spare after meeting the essential expenditures for food, clothing and shelter, is so little that unless the medical expeness are shared by all, it is impossible for him to bear the heavy and concentrated costs of sickness. So a contributory system has to be evolved. I dare say that the contributions may not be enough and will have to be subsidised by the state or local body.

Good medical care is rarely cheap, and cheap medical care is rarely economical. Until rural India can acquire facilities which the medical practitioner needs to render good service, it cannot attract any able physician. But facilities, important though they are, are not enough. The doctor must be adequately compensated for his services.

Education—The other important factors necessary for the provision of good medical care are education and communication. A poorly educated nation cannot maintain sound health practices. There are phychological inhibitions due to lack of education. Singur Survey showed that education played an important part in the choice of medical attendant. Among the illiterates much fewer than the expected number seeks qualified medical advice, while a proportionately large number remains unattended. Among the just literates, proportionately larger numbers prefer treatment by qualified practitioners. Economic stability is closely associated with medical attendance. Improved economic status and particularly education are likely to increase the recognition and appreciation of scientific medicine. It was evident that the much advertised aversion to western medicine among the rural population is but a minor cause of not requisitioning scientific medical aid.

Lack of communication—Lack of communications and geographical handicaps render medical aid a difficult and often an impossible task.

Individualistic Outlook of People—Individualism in the matter of medical relief is doomed to failure. The minimum expenditure for the protection of health and cure of disease is beyond the means of the average individual. So we must pool our resources and funds, so that everyone contributes in proportion to his income, but derives the benefit he needs.

Out of the population in a given year, only so many are sick. Of the people who are sick, a considerable proportion is indignant. We can always guess the average number that will be sick in a year, but no one can say what will be the burden of sickness on the individual at any time. Only a comparatively few are sick, and they have to bear the burden of heavy medical costs. It is impossible for them to bear this cost unless we can devise a method that will spread the payment over a much longer period of time than just the period of actual illness. It must also be spread over a large number of individuals. In other words there must be periodic payments of small amounts over a long period of time by every one capable of paying to provide for the concentrated cost of illness. I am confident this is feasible, only if the people can be convinced of its effectiveness and value.

In the Singur Survey, as I stated previously, it was found that the people were spending Rs. 2-8-0 and the government annas 2-6 per capita for medical relief in the area, or a total of Rs. 2-10-6. The Bhore Committee recommendations involve during the first ten years of their execution an anticipated expenditure Rs. 114-0 per head of the population. It has not been possible to give effect to Bhore Committee recommendations owing to lack of funds.

Now, individually we are spending much more more than we need for the implementation of the Bhore Committee proposals. If we could only pool this amount, we could offer a good medical service; but this is not possible as people have got individualistic and not socialistic ideas.

Frustration from failure to obtain results—The Singur Survey showed that the most important reason for not requisitioning scientific medical aid was due to frustration arising out of failure of the qualified practitioners to give relief to the patient. Most of these were chronic illnesses, e.g., heart diseases, tuberculosis, leprosy etc.

What Can be Done

Although the medical man is deeply interested in medical welfare of the society, yet most of the difficulties, as discussed above, important though they are, are beyond the orbit of the physician, and their solution is more of a national problem.

The main non-medical problems are, economic, educational and facilities of communications, and can only be tackled by the State. Already the National Government is taking action in the matter.

Ours is a poor nation, so there is no sense reiterating what has been done in other countries. Health system of a country has to be built to a great extent into its administrative and economic structure. It is foolish to try to adopt methods of other countries

whose administrative structure, economic condition and psychology of the people are different.

Now, coming to practical details of what can be done, I am of the opinion that expansion of medical institutions in rural areas is not possible. I will only present what I consider is practicable and feasible under the present conditions and I will be discussing this under the following heads:—

1. Curative medical relief.
2. Preventive medicine.
3. Midwifery and school medical service.
4. Communications.
5. Cost of medical care.

Curative—The villager is very unwilling to leave his home and people, specially when he is sick and wants to be among them; so to provide him with medical care, the aid has to be taken as near to him as possible. Provision of bigger district or provincial hospitals will not suit his purpose.

Our system of medicine has proved most successful in prevention of diseases, and in the treatment of acute illnesses. So we must concentrate on these two. We have now got drugs with which we can cure most of the acute diseases. We cannot show such good results in the case of chronic illnesses. Singur Survey has shown that one of the main reasons of the unpopularity of our system is from frustration where the patients did not get benefit from the treatment and almost all of these cases were of chronic illness as stated above.

Most of our rural places have got a dispensary within 5-6 miles. The remuneration of these medical officers is often so low that no one will go there. In the East Punjab about 50 of such dispensaries have been given over to the indigenous practitioners as medical officers were not available at that low pay. Even in the present dispensaries which are staffed by qualified people, the grant is so low that they can hardly afford to give the best treatment possible. These are nothing but mere 'Bottle-khanas' dispensing coloured water. Before we can think of expanding our rural medical relief measures, we must see that these already existing institutions are properly equipped and supplied with modern drugs in adequate quantities. It is stupid making attractive paper plans when we have not got the resources to implement them.

The Government of India, I understand, appointed a Committee for advising them regarding Rural Medical Relief. The Committee mostly composed of specialists and experts, who were considered experts because of their huge city practice and hardly any of them ever seen a village dispensary or knew any thing of rural life or economy. The government never made public their recommendations, presumably they were not worth it.

I most emphatically state that before we proceed any further, we must equip the existing institutions so that we can efficiently treat acute illnesses. Most of the dispensaries are very ill supplied with the most essential modern drugs. Of the equipment a microscope is essential for diagnosis. None of our rural dispensaries have it. How can any one be expected to treat a case without diagnosis, and in this country it is impossible without a microscope.

Every medical officer before he is posted to a rural dispensary must be given a special course of instruction how things can best be done in rural areas with very limited resources, and it must include microscopical examination of blood, urine, stool, etc., as he will have no laboratory expert to help him.

Some of the rural dispensaries will become more popular than others, depending on the ability of the doctor. In such cases temporary sheds should be provided to accommodate the increased number of patients, mainly from subscription from donors and grateful patients, subsidised by the state or local body. If an institution is becoming popular, it must be encouraged by outside help. Opening of more dispensaries under our present conditions will be foolishness, as we cannot maintain the present ones efficiently and will bring more disrepute to our system.

How to attract doctors to rural areas?—1. Giving them better pay to compensate for the harder life and inconveniences associated with rural life. In Russia the more clever people are sent to the rural areas, as they have to work single-handed without any help from other doctors. They are paid 15-20 per cent more than usual pay.

2. Earning money is not the only attraction a doctor has. He wants to do his work well, and this is not possible in rural dispensaries, as there are hardly any facilities for him there, to do the things he has learnt. Provision of microscope and supply of good new drugs will encourage him.

3. It may be ordained by the state that every graduate, after graduation must work for six months as a house officer and then for another six months in a rural dispensary, to accustom him to work in villages and to take away the fear of rural practice.

4. People who have done good work in rural places should be given preference for better appointments by the state. The fear that once one goes to the villages, he will never get out of it, keeps away many people away from going to village dispensaries.

Preventive Medicine—Prevention is not only better but cheaper than cure. The best way to reduce medical costs is to prevent illness. This is so obvious that it is often forgotten. In a country whose economic condition does not allow efficient curative service, the only hope lies in prevention. So in rural areas we must push preventive medicine to the utmost.

As an individual the Indian is no doubt very clean, but when it comes to the question of community, we find it most deplorable. The open air abode of nature is converted into dung heaps and dark, dingy, filthy places separated by foul smelling gutters and cesspools, and with every effort to keep the fresh air out.

We must infuse the spirit of community cleanliness, before everything else, if we want to improve the health of the villages.

Public health education and intensive hygiene work, are of primary importance, because no government can bear the burden of public health work for the whole population, and it is in this sphere—the sphere of self-exertion that the future is to be prepared.

To awaken in the people a permanent active interest in hygienic habits and to stimulate their self-exertion for the maintenance of their health, the activities need be so planned that they quietly and gradually penetrate and become part of their normal life, and use methods which will secure their active interest and co-operation. To secure co-operation health educational work must propose practical measures—not only the children, but adults as well, especially women, must be taught. Education of a man is education of only one person, education of a woman is education of a family. If the people can be taught that they themselves can carry out certain simple measures, which will help them to avoid certain diseases, they will learn to live hygienically, and thus build up their resistance to many other diseases. House visit is the most valuable form of education. Public lectures awaken temporary interest and as such they are of very little use for public health education in rural villages.

For this purpose we want a different type of health workers. So a class of workers must be provided to carry out the preventive work. They may be called Feldshers, health educator, health aider, health protector, or any other epithet but not doctor. Their training may consist of three years' course after matriculation, with a curriculum as under,

First Year—Anatomy—only essentials. No dissection but they should see the parts dissected by MBBS students.

Physiology—only elementary, from the point of view of biology.

Pharmacology—only 20-25 main drugs.

Chemistry—only elementary.

Second Year—Hygiene and Public Health of the same standard as the MBBS.

Pathology and practical immunology—essentials only.

Midwifery—Normal and abnormal labour.

Third Year—Medicine and Surgery.

Clinical training—2 years, second and third years. 6 months medicine, 6 months surgery including eye, ear, nose and throat and 6 months midwifery.

The duties of the health educator will include,

(*i*) Instructions regarding preservation of health.
(*ii*) Preventive inoculations.
(*iii*) Keeping the villages clean. Sanitary and anti-mosquito work should be planned by him and executed with the help of voluntary workers, which every village must supply, for example every adult working one day a month.
(*iv*) Other preventive measures including treatment for hook-worm disease and malaria.

There should be one Health Educator for 6-10 villages.

House visit is the most valuable part of health education. There should be 2-3 health visitors working under each health educator. The health visitors will go from house to house and educate the people in health matters. It is more important for the women folk to be educated; however enlightened the men may be, unless the women folk carry out the details of hygiene work, nothing can be achieved. So educative work by women health visitors among women folk is essential if improvements in health and hygiene are to be attained.

Maternity and Child-welfare Service—Each big village or a group of 2-3 small villages should have a small clean hut reserved for maternity shelter where women may go for confinement with one or two attendants to look after her. The place should be in charge of the health visitor, who should also be a trained *Dai*, under the supervision of the health educator.

The health educator should examine every pregnant woman periodically, and if he expects any difficulty or abnormality during labour, should advise her to go to the nearest place where efficient aid will be available for delivery if necessary.

This place can also be used as ante-natal and post-natal work and child welfare centre by the health visitor.

School Medical Service—School children in the area should be periodically inspected by the health educator and parents advised about their welfare. He should also give instructions to school children about hygiene and health matters.

Communications—The local bodies should be urged to improve the roads between the villages and the dispensary and between the dispensary and the Tehsil and/or District headquarters.

Every Tehsil should have an ambulance car for transporting patients.

Costs of Medical Care—No scheme of medical relief can be run without adequate finances behind it. Whenever we talk of medical relief, we think in terms of governmental measures. No government even that of United States or of Great Britain can run a free medical service for the people. It is the peoples service and people must help to run it. When the people have done their own bit, I am sure government will help. so self-help must come first. The main source of funds should be from contribution of the people deriving the benefit and then the state and/or local body will help. The difficult task is of organisation and collection and for this co-operative societies may be formed.

Sale of drugs to well-to-do people may bring in a certain income.

A social custom may be built up that every family in its social or religious functions, *e.g.*, birth, mundan, wedding, kriya, etc. ceremonies should offer a donation to the dispensary.

A tax may be levied on bigger sales in any 'Mandi' in the area or weekly bazars as in many parts of Bengal and Assam.

Under the present financial limitations more emphasis need be paid to the quality rather than the quantity of service. If we sacrifice quality for quantity, it will only bring discredit to our system. So until we are in a position to provide large number of more suitable institutions, we must concentrate our efforts in prevention of diseases, health education and efficient treatment of acute illnesses.

IV

THE ORGANISATION OF RURAL MEDICAL RELIEF IN WEST BENGAL

A. K. SARKAR, M.B., D.P.H.,

Nabadwip, West Bengal.

In memo No. Med. 2682/1-H-108/48(13) of date 7.6.48 Sri A. C. Chatterjee, as Secretary to the Government of West Bengal has given a lucid expression of the present situation of rural medical relief in West Bengal in the following passages:—

"The physical condition of the people of Bengal is far below not only of most of the civilised parts of the world, but also that of major portion of India. This is largely due to the prevalence of preventible diseases, but malnutrition, lack of health education and physical culture also play a part. Of the preventible diseases—and as a matter of fact, as a large contributory cause of many other diseases such as tuberculosis —malaria is by far the most important disease. It is the greatest problem that we have to solve. In the preparation days the average number of deaths from this diseases alone was about half a million in Bengal. West Bengal has been devastated for a much longer time by malaria than East Bengal. Therefore malaria still remains by far the most difficult problem in this Province.

"Tuberculosis is yet another problem that has to be tackled, so also are dysentery, diarrhœa and intestinal worm. Cholera and small-pox also take a heavy toll although much less than any of the diseases mentioned before.

"Infant mortality is very high, maternal deaths are not low either":

The above statement is based on the statistics available in the office of Director of Health Services. He is justified in stating further that by establishing dispensaries and hospitals only, it would not be practicable to eliminate even preventible diseases. It is neither a practical proposition at the present moment, as the separate organisation for the medical aid and for the public health workers for a period of 30 years could not meet the need of the country as expected. He has, therefore, suggested the establishment of dispensary and hospitals combining the preventive and curative methods. That can really bring a satisfactory result.

There are *2,050 Union Boards* in West Bengal at present, so he proposed to establish 641 Union Health Centres. Of these 130 will be newly established and 511 existing charitable dispensaries are to be converted into Union Health Centres. Each such centre will have the following staff:—(1) One rural medical officer of health, (2) one health assistant, (3) one trained Dai, (4) one medicine carrier, (5) one ward attendant, (6) one sweeper, (7) one compounder *cum* attendant.

In each centre there will be a dispensary and a 4 bedded emergency ward. Of these 4, 2 beds will be set apart for maternity cases and 2 for emergent cases.

It has also been roughly estimated that the capital cost of establishing one Union Health Centre will be Rs. 22,740/- of which Rs. 21,050/- will be necessary for the buildings and the balance being required for equipment, appliance and instruments. The recurring cost per year will be Rs. 10,236/- on an average.

There will be a small advisory committee consisting of (1) Circle Officer as chairman, (2) presidents of U. B., (3) a local school teacher nominated by the district magistrate, (4) rural medical officer of health as secretary, (5) a woman representative of the people nominated by the district magistrate. Their function will be (*i*) to instruct the workings of Health Centre, (*ii*) to make suggestion for the better workings and (*iii*) to inspect any health work carried out as anti-malaria work, water supply or the like. Such committee will hold meeting once every 2 months but may hold meetings oftener if necessary.

The next Health Unit will be the Thana Health Centre, in which there will be a 30 to 50 bedded hospital. It will comprise of the following allotment of beds, medical 10, surgical 10, maternity 5 and infectious 5.

The staff of a Thana Centre will be as follows:

1 medical officer, 1 compounder, 1 health visitor, 2 ward assistants, 1 masalchi, 1 chowkidar *cum* mali, 6 to 10 nurses, 1 health assistant, 1 health inspector, 1 cook, 2 sweepers, 1 mistry. The capital expenditure estimated is Rs. 58,280/- and recurrent Rs. 50,000/- per annum.

It was proposed that 60 of this type linked up with 200 Union Health Centres were expected to be started within 1948. But the progress made is most disappointing and only 2 Union Health Centres could be opened. As a result Government had to surrender about a crore and a half rupees to the India Government even though the Government raised about 8 lacs of rupees from private sources and another 16 lacs were promised from whole of West Bengal for this purpose. These show that the administrative machine for West Bengal is not so active and attentive

as expected to do the needful while urgency needs it. The attention of the minister of health department and of the Chief Minister is earnestly drawn to look to their responsibility, as the people can't wait any more.

The country is really sick of speeches, tall talks, schemes and committees but they need action only. Independent India wants people who are alert, active, alive to their responsibilities and duties and sympathetic towards suffering humanity. No indifference, apathy and lethargy can be tolerated any longer.

No doubt there are difficulties in converting existing charitable dispensaries and hospitals vested on the local authorities by private individuals for their maintenance. But when such conversion is considered good for the sake of the people no body will object and legal difficulties may also be solved by adoption of "regulations for emergent circumstances." The Director of Health Services selected doctors and health assistants and these doctors and health assistants got training upto March last. But it is reported no other classes were taken up in April last as expected. It is further stated that those who got training are not being employed to draw their pay and allowance. Thus a great injustice has been done on the doctors and health assistants who are in great difficulty to maintain their families. Any how or other they may be immediately deputed for anti-malarial survey when they may gradually organise centres, at least 3 miles off from one another to be attended once a week for 2 to 3 hours to give medical aid, to attend village schools to educate children hygienic principles and to deliver magic lantern lectures once a week at H. E. or M. E. schools where all people may attend. If these works are taken up half the work will be organised.

It is really a difficult problem to have adequate accommodation in villages for these doctors. But from personal experience I may say that if the doctors approach rich people still residing in West Bengal villages, they will certainly accommodate them temporarily and doctors may gradually induce them to establish charitable dispensaries at their cost while the Government will contribute for the health works. Thus the plan as drafted by the Director of Health Services may be effective to give medical aid to the rural people.

During a period of 23 years in the District of Faridpur, I had to organise charitable dispensaries to raise the number of the same from 0 to 130. I had to adopt similar policy to depute doctors to certain villages to open 3 centres for treatment. Gradually local people came and provided for dispensary buildings and equipment while Union Board and District Board and Government contributed for the recurring expenditure. It is only to educate village people and to show them how they are benefited by such institutions. Everybody co-operated with the doctor. If the people insist on the Government, doctors have adequate remuneration in due course.

Local authorities have failed to manage works for the medical aid and health work. So the Government have been compelled to take up the responsibility, while the Government of India agreed to contribute. The Editor of the J.I.M.A. is certainly justified in stating that if suffering humanity cannot get the desired relief, highly paid officers of the state have no justification to continue with their inefficiency but should hand over responsibility to abler, energetic persons with wider vision and sympathetic outlook.

In West Bengal annual deaths for malaria alone comes to 1,11,000 out of a total population of 2,11,00,000. If the mortality rate is calculated at only 1 per cent, it appears that the total number of persons suffering from malaria alone comes to 1,110,000 per year. Now if we consider the economic loss due to death, treatment cost, loss of working days, funeral cost, loss of efficiency in work, it would be a fabulous sum.

Lt. Col. Sinton the late Director of Imperial Malaria Research Institute worked out these costs for whole India which comes to Rs. 10,850 lacs annually (Rs. 108.5 crores).

As regards the location of sites for 130 new Union Centres, they should be very cautiously considered. Besides the Thana headquarters and the existing charitable dispensaries within Union Board areas, they are to be established at a central place within 2 or 3 Union Board areas where people from such areas can be conveniently treated.

As regards the recruitment of doctors, it is certainly regretted that none can be expected to join on Rs. 150/- plus 45/- with quarters, as one can hardly meet monthly expenses for family at less than Rs. 300/- even in a village. There will be no difficulty in recruiting medico at the present moment while refugee doctors have got a chance for Registration and about 1000 may have registration within 31.12.49.

V

OPINION OF THE INDIAN MEDICAL ASSOCIATION ON THE CHOPRA COMMITTEE'S REPORT ON INDIGENOUS SYSTEMS OF MEDICINE

Preface

The Indian Medical Association is the representative national association of the medical practitioners of India possessing registrable qualifications in scientific or so-called 'Western' medicine and is recognised as such by the Government, the World Medical Association and the World Health Organisation of the U.N.O. The chief objects of the Association are the "promotion and advancement of the medical and allied sciences in all their different branches" and the "improvement of Public Health and Medical Education in India."

When the Indian Medical Association has to put forward its considered opinion regarding the Indi-

genous or any other system of medicine, the Association has to bear in mind the ultimate cause for which medicine in any form or shape has to be utilised. The health of the nation and particularly the health of the poorer sections of the people in rural and urban areas is the most important consideration in the light of which such problems have to be taken into account. In this perspective the Association highly appreciates the following speech delivered by the Hon'ble Rajkumari Amrit Kaur, Minister of Health of the Government of India at the closing session of the Silver Jubilee session of the All-India Medical Conference held at Calcutta in December, 1948:

> "I viewed with grave concern the policy that is being enunciated by some of our provinces, in the matter of lowering still further the standards of qualification of your great profession. The argument advanced in favour of such action is the lack of aid to rural areas. That lack exists to our eternal shame, but to try to solve it by turning out half-baked medical personnel is to defeat the very object in view. Why should the poor men be given second best in any case?... Cheap Medicine and lower qualifications will not be cheaper even from the financial point of view. On the other hand, they will not only lower the standards of your profession but they will, in the long run, cause havoc to the cause of the nation's health."

The next important factors to be taken into serious consideration are the undertaking of certain responsibilities in the field of international health and the establishment of reciprocal relations with other countries of the world. Lately the Government of India has become an important member of the World Health Organization and India has been greatly benefited by this. The health services developed in this country should therefore, be such as to enable the Government of India to fulfil these international obligations. Dr. K. C. K. E. Raja, the Director-General of Health Services, Government of India has, rightly pointed out that "participation by India in the standardisation of diagnostic procedure, in the development of international standards in respect of biological, pharmaceutical and similar products or in the study and report on administrative and social technique affecting public health and preventive care will become impossible unless she (India) adopts the same system of medicine (the modern scientific system) which other nations have adopted for organization of "State Health Services".

Financial considerations would form the next important factors for judgment in such matters. The estimated cost of building and equipping a modern medical college now-a-days is well over half a crore of rupees. If separate modern teaching institutions for indigenous and other systems of medicine have to be built all over the country in addition to the new medical colleges for Scientific Medicine that are necessary, the cost of construction and equipment and recurring expenses on these is sure to prove to be prohibitive, unnecessary and wasteful.

In India, sick persons are treated by three classes of individuals, (*i*) those who possess registrable qualifications in modern scientific (western) medicine, (*ii*) those who are practitioners of the system of Ayurveda, Unani and Homœopathy and (*iii*) unqualified practitioners. It is sometimes said that in a democratic country, the individual citizen has the absolute right to take his ailments for treatment to anybody he chooses. If that be true, why a moratorium extending to a definite period of years was declared in China and Japan after which the practice of the indigenous systems in these countries would not be recognised. It may be further noted that national governments of Turkey, Iraq, Iran and Siam have also adopted an unified system of medicine based on modern sciences. Moreover, it is high time for our legislators to consider seriously the reasons for which Indigenous Systems are not recognised by the State as separate systems of medicine in any other country in the world.

Medical science is one and undivisible. It is a progressive science based on the fundamental sciences of Physics, Chemistry and Physiology and on research work carried out by scientists and medical men throughout the world. Modern scientific medicine should not be lebelled as "Western" simply because in the middle of the 19th century, medical science became progressive and was firmly established on a secure foundation initially in the western countries.

The word "Western" medicine has been used throughout the Chopra Committee's report to connote modern scientific medicine. If the stigma of "Western" or "Foreign" is applied to *allopathy* or modern medicine as practised in India to-day the stigma could equally be applied to all branches of modern science (including Physics, Chemistry and Engineering) which are being developed on the modern lines with State assistance. Moreover we cannot afford to ignore the invaluable contributions made by the eminent scientists and medical men of Japan, China, India and other eastern countries to the development of the "western" medicine.

During the British regime in India from 1757 to 1947 the health of India was of little consequence, in the eye of the Government and therefore, factors responsible for the low level of health were allowed to flourish with impunity. It is obvious that the gross inadequacy of provision by the state of adequate services by duly qualified medical practitioners in scientific medicine and the cheapness of charges made by indigenous and homœopathic practitioners and quacks for their drugs and services rendered are responsible for the continuance of these systems as well as quackery in this country. Till the other day it has been said by many that for a poor country like India, the training for the production of medical licentiates should be continued so that this cheaper class of medical practitioners would go to the villages and settle there to the benefit of the rural people. But fortunately for our country, this argument has

been proved to be fallacious and steps have now been taken through India to stop further production of the licentiate type of doctors.

With the attainment of independence, it is just and proper to opine that measures for the protection and promotion of health of the people of our free country *should be given the highest priority in any scheme formulated by the Government.* We are strongly of the opinion that it would be unfair and unjust, on the part of the Government to deny to any one in this country the full benefit of the modern medical science merely because some other method of treatment is said to be cheaper. The question of cheapness would certainly not arise if the State can provide for employment of an adequate number of qualified medical practitioners in scientific medicine and for the establishment of a net work of modern hospitals in rural and urban areas.

We feel it is now most appropriate time for not only stoppage of further development of quackery but also of further development of practitioners of indigenous systems of medicine and homœopathy. The necessary measures should be incorporated in an act and should be passed by the legislature at an early date, and those persons trained in indigenous systems of medicine who are in actual practice now and are having their livelihood from it, should be absorbed in future Government public health scheme as public health workers after adequate and proper training.

Note on Chopra Committee's Report

The Committee on the Indigenous Systems of Medicine popularly known as the Chopra Committee, was appointed by the Government of India in December 1946 under the Chairmanship of Col. R. N. Chopra. The Committee contacted and elicited the opinion of various scientific, medical and non-medical bodies and associations of the country, in order to evolve an improved and unified system of medicine.

The Chopra Committee recommended the formation of a statutory body which when created, is to be called the National Medical Board. This Board will consist of two autonomous sections—one dealing with Western Medicine and the other with Indian Medicine. It has also recommended that the first step will be an integration of the courses of study by arranging curricula in such a way that whatever is weak in the one system is supplemented and strengthened by the strong points in the other system. The second step, according to the Chopra Committee, should be the teaching of each subject by the same teacher, instead of by separate teachers as now, giving the students an unified view of the Indian and Western Medicines. The final step the Committee says, will be the field of research where experts of Indian and Western Medicines will work side by side checking and verifying the various hypotheses and theories, either rejecting or harmonising them. If they are such that they could neither be reconciled nor rejected, they are to be used as parallel hypotheses.

The Committee has sought to create substandard medical qualifications of five or six different categories—under the plea of absorbing the existing Vaids and utilising them for mass medical relief in rural areas. They have recommended a short term licentiate course in Indian Medicine of 3 years. A still shorter course of 6 months only to absorb the existing Vaids whether trained or untrained. The highest course or the degree course will be for 5 years. All these courses are to include varying quotas of instruction from modern medicine.

There are to be different registers for different classes of practitioners in Western, and Indian Medicine, subdivided into sections for 'institutionally' trained, 'non-institutionally' trained, and 'untrained' classes of them. Heaven alone can help India and her woe-begone people if such a state of affairs be actually brought into being.

Chopra Committee's recommendations will create a complete confusion not only in the standard of medical qualification and efficiency of medical relief, but will result in a multilateral administration of public health from which order and co-ordination will entirely disappear.

The I.M.A. is of the considered opinion that the steps suggested by the Chopra Committee should be considered in the reversed order. The first step should be to sift scientifically the grain from the chaff, after careful research and then to accept the grain of established truth and reject the staff as useless and injurious. After this, the second step proposed by Chopra Committee may be taken, whereas the first step proposed by the Committee will be apparently futile, as teaching must be clear, unambiguous and absolutely free from confusion and contradiction. The question of strengthening the weak points of each system does not, therefore, arise. The experiment made in this regard in the Government school of indigenous medicine at Madras for about a quarter of a century has resulted in hopeless failure and created nothing but confusion in the minds of the alumni of this school.

Terms used in the ancient books of Ayurveda are irreconcilable in their meaning and application—and differently interpreted even by veteran Ayurvedic scholars. They cannot threrefore be profitably utilised except by students of research and history. Yet, the Committee has continuously pleaded in favour of combining in their recommended courses of study, the curricula of indigenous systems of medicine, just as they are, with merely a spattering of western medicine by way of ornamental window dressing.

Col. Sir R. N. Chopra has himself said in his book on the Indigenous Drugs of India (1933) "when it is remembered that the Ayurvedic system of medicine has been practically stationary for about 1500 years.... one would find it very difficult to reconcile the old theories of 2000 years age.... with the recent advance of the world in science. After imparting instructions to the Ayurvedic students in

modern Physiology, Bacteriology, Pathology, etc., to ask to apply them therein the doctrine of *Vayu, Pittah* and *Kafa* etc. to explain the causation of disease.... can bring nothing but chaos and discord to their minds."

The opinion of the scientists of India can be gathered from the following speech of late Sir P. C. Ray, the father of scientific research in India, delivered on the occasion of the foundation day of the Calcutta Medical College in 1940:—

"I am afraid I am looking behind me, and this has been to a great extent, the bane which has checked the progress of the country. We must now look forward and judge where we stand in the present world which is based on scientific civilisation. Although I have referred to the Ayurveda, I should say that the policy of passing off the Indigenous system of medicine as scientific systems of medicine after putting a veneer of modern medicine like Physiology and Anatomy on them does not seem to me to be the correct course. The policy should rather be to accept the Western Scientific system of medicine as the nucleus round which the tested knowledge derived from the indigenous systems of medicine may be gathered, all our knowledge should be accumulated on scientific lines."

The Committee toured over provinces and States, met practitioners and representatives of various organisations. They issued questionnaires, which also were generously responded to from different parts of the country.

It is all the more deplorable therefore that the Committee lapsed into a morass of confusion, born out of a sheer disregard for the method of synthesis advocated by medical and scientific experts such as the Indian Medical Association, the Royal Asiatic Society, the Indian Association for the Cultivation of Science and last but not least the expert opinions of patriarchal scientists such as Sir Nilratan Sircar, Sir P. C. Roy and even Sir R. N. Chopra himself.

Recommendations

It should be the duty of politicians and medical men to build up an efficient system of medical relief, on par with the modern scientific standard of other progressive countries and not to manufacture more ill-qualified practitioners—and licensed quacks—and let them loose on the public—particularly in remote and helpless rural areas. There can be no mixed teaching, half-Ayurveda, and half modern medicine. Teaching must be standardised and uniform according to the recommendations of the Indian Medical Council. The result of barrowing of powerful medicinal specifics by untrained and ill-trained members, has been quite disastrous and has inflicted "serious injury on many patients"—to the knowledge of and in the words of the Chopra Committee itself.

Uniformity in the strength and standardisation of drugs and medical appliances is quite as important as uniformity in the standard of minimum registrable qualification as laid down by the Indian Medical Council. Therefore there must be compulsory registration of pharmaceutists and compulsory examination for persons dispensing drugs.

In conclusion, we do not think it a practical proposition, nor a desirable one, to have State organisations of public health and medical relief in the indigenous systems or in a number of separate systems. Apart from the fact that it will entail too heavy a burden on the State and on the people, it will only lead to confusion and defeat the main object, *viz.* the welfare of the masses to whom we consider, the scientific system should be made extensively and intensively available within the shortest possible time. There should, in our opinion, be one State system, and that should be a really scientific system based on the modern advances in the field of natural sciences. We will take into it those materials in Ayurvedic and Unani as are proved to be of value by modern scientific tests and experiments; but the basic teaching should be as in modern medicine (commonly called Western Medicine), for, it is the system which is keeping pace with advancements in science and includes many subjects and branch-subjects unknown to the indigenous system or entirely lost.

In the *one* system which we advocate, so much of the materials in our old systems as are "proved" by modern tests, will, as already stated, be assimilated and should be taught to the students in the medical college and medical schools. We suggest that for the purpose proper research institutions should be established without delay with capable investigators and experts. We also suggest that every University should have a Chair of History of Medicine including Indian Medicine, with facilities of research on Ayurvedic and other indigenous medicines and with provision of beds for this purpose in a teaching hospital.

We also reiterate the memorandum submitted by us and published in Vol. II App. C 6441 of the Chopra Committee's Report and desist from reduplicating the points and issues raised therein.

The I.M.A. must warn once again against all attempts at setting back the hands of the clock of scientific progress. It will be doing a grave disservice to India's millions as also the cause of preventive and curative medicine—the noblest branch of science applied to the alleviation of human suffering.

In the best interests of the people, we demand that our national Government must not tinker and temporise with the problem but provide the people with the essential requirements of medical education and medical relief as far as possible upto the standard of other progressive countries of the world.*

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* The Working Committee, I.M.A. appointed a special Sub-Committee consisting of Drs. K. K. Sen Gupta, P. K. Guha, A. K. Sen (Convener), A. D. Mukharji (co-opted) and Dr. A. C. Ukil (co-opted). The Sub-Committee formulated a preliminary report which was circulated to all Provincial Branches of the I.M.A. and the members of the Working Committee. In accordance with the opinions received the final report was drawn, endorsed by the Working Committee and forwarded to the Government of India.

JOURNAL OF THE

INDIAN MEDICAL ASSOCIATION

CALCUTTA, MARCH, 1950

THE SOVEREIGN DEMOCRATIC REPUBLIC

The emergence of India into the status of a Sovereign Democratic Republic along with the inauguration of her new constitution—on the 26th January, 1950—forms a memorable landmark in the World's political evolution. The successive stages of this evolution and its onward march through two global wars within one generation, with all the devastation and aftermath of sorrow and suffering will not fail to excite the surprised admiration of all students of comparative politics.

We offer our sincere felicitations to Dr. Rajendra Prasad, the first President of the Republic, Raj Kumari Srimati Amrit Kaur, the Hon'ble Minister of Health and to other Honorable Ministers of the Republic and pray that our new Republic may keep the flag of democracy flying and champion the cause of freedom, progress and peace.

The President took the oath, pledging that he would faithfully and to the best of his ability 'preserve, protect and defend the constitution and the law' and devote himself 'to the service and well-being of the people of India', and strive for justice, liberty and equality to all citizens.

We find for the first time in the long and eventful history of our country, that the administration of the people will henceforth be carried on by the people for the welfare and improvement of the people themselves.

We pay our most profound homage to the memory of Mahatmaji, the patron saint of India, through whose direction and guidance this evolution was brought about by a peaceful and nonviolent struggle. For, it was not a revolution in the sense that we have used it so long in history to indicate events such as the French Revolution of 1789 or the Russian Revolution of 1917. Reforms came slowly from the hands of British Bureaucratic Government through various phases and stages. Shortly after the first great war, we were treated verily as babies and tried with the Montague Chelmsford Reforms with a dash of village self-government. It was tested by the people but found stale and hallow. The accompanying communal electorate has left a sufficiently deep and indelible impress upon the memory of the people never-to-be-forgotten by them so long as their history lives. Next came the Dominion Status with the vivisection of India with a blood bath and mass migration.

The independence, the Sovereign Democratic Republic, has, however, been achieved by India herself —twenty years after the declaration of the Day of Independence by the Indian National Congress. It would not be fair if we did not acknowledge, at the same time, that it reflects not a little credit on the people of Britain —that the actual transfer of power from them to the people of India was a gentleman's transaction. In the context of the evolution that we have recounted above it will be evident that everything in connection with Public Health and Medical Relief that was handed down to us, was what was planned and executed by the Britishers after their own ideas in a line with their own manner of work. Therefore the whole framework of medicine, medical education, medical services and medical administration of the country as it exists to-day is the legacy of the British Government. There is great and immediate need of recasting and remodelling the whole thing on an advanced and upto-date model, so that it may function immaculately for the greatest good of the greatest number. But the bugbear of an expeditious and all-comprehensive renovation, is the slender financial resources of the country. The spectre of dwindling revenue and deteriorating of unprofitable capital investment is stalking the land. India is faced with a financial crisis which is both grave and unprecedented. We need not be over-cheerful over our political freedom, therefore, as our economic emancipation still remains to be worked out by hard and sustained efforts by all our countrymen for a none-too-short period of futurity. We hope and pray therefore that India with her wisdom of immemorial Vedic antiquity—with the ferment of youth in her new-born freedom will rededicate herself to her mission of peace and prosperity and embark on her voyage with faith and courage.

The objective of our Republic has been defined to secure equality, liberty and justice for all its citizens,

to promote fraternity among its people internally and to live on terms of friendship with all other countries.

Our programme is to get rid of disease, poverty and ignorance and to do our best to rehabilitate and resettle in life all those displaced persons who have suffered and are still suffering great hardships and privations.

In the Directive Principles of State Policy (Art. 47 of the Constitution) it has been avowed by the State that "The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibition of the consumption, except for medicinal purposes, of intoxicating drinks and of drugs which are injurious to health." Besides, "the State (Arts. 41, 42 and 45) shall within the limits of its economic capacity and development, make effective provision for securing the right to work, to education (free and compulsory to all children upto the age of 14 years) and to public assistance in cases of unemployment, old age, sickness and disablement and in other cases of undeserved want. The State shall make provision for securing just and humane conditions of work and for maternity relief."

We have pointed out already that there may be quite a ponderable period of time that we may have to wait to see the consummation of the above profession about the sincerity and correctness of which there can be no question. We have been somewhat disappointed in the past to have to point out the usual red-tapism and official procrastination between profession and practice, promise and performance. The fate of the blue-print of the Bhore Committee's Report is still too fresh in our memory. There was much more enthusiasm before the compilation of the Report but much less of it remained when the time came, and people demanded for its implementation in action.

There must be also a reorientation in the policy of the Indian Medical Association. The Association was formed when the medical men of India had to meet the challenge of a foreign Power, which constantly tried to keep them in check and under subordination. It is time that the medical profession to-day should place the interest of the society above their individual or professional interests. In all our contact with our countrymen, in preventive and curative approaches of medical science, we must not only consider the individuality of the patients but take into careful consideration his whole environmental setting, his familial and social *milieu*. The Government also, in their part, should take the Association into their confidence in evolving and executing schemes of public health and medical relief in any province or State.

Medical education of the country must be more realistic and must have actual reference to diseases and conditions that prevail and operate in villages where more than 90 per cent of India's population reside. It should be required of every medical student to stay at least for three months in rural areas and see for himself the conditions there and adapt himself to his surroundings.

The Indian Medical Council in its inception was a creation of the foreign Government and was moulded and shaped on British lines. It must now justify its existence and play its role efficiently according to the present needs of the country, perhaps on a wider and more democratic basis.

We hope our trusted elders, the experienced lieutenants of our tried and farsighted statesmen will not rest on their seats, till they demonstrate to the woe-begone multitude of this vast sub-continent that the proof of the 'constitution' lies in the utilization thereof, in actually exorcising the ghosts of poverty, pestilence and illiteracy.

NOTES AND NEWS

THE DR. B. S. SHROFF MEMORIAL GOLD MEDAL

The following subject has been selected by the Bombay Medical Union for competitive thesis for the above Prize for 1949.

"Medical Problems met with in Textile Industrial Centres and suggestions *re.* promotion of their health."

The award will be in the form of a gold medal called the "Dr. B. S. Shroff Memorial Gold Medal" of the Bombay Medical Union.

The competitor must be (*i*) a duly qualified member of the medical profession holding a degree or degrees and diplomas from Indian and other universities created by statute, or (*ii*) a duly qualified member of the medical profession holding the Diploma of Membership of the College of Physicians and Surgeons of Bombay.

The thesis must be sent in three clear typed copies so as to reach the Honorary Secretaries, Bombay Medical Union, Blavatsky Lodge Building, French Bridge, Chowpatty, Bombay 7, by the 30th June 1950.

The thesis should be designated by a motto instead of the writer's name and should be accompanied by a sealed cover containing the name of the writer and his Post-Office address.

The name of the Prize, the year of the competition, the subject of the thesis, and the writer's motto should be superscribed on the cover.

No study or essay that has been published in the medical press or elsewhere will be considered eligible for the prize, and no contribution, offered in one year will be accepted in any subsequent year unless it includes evidence of further work.

The accepted thesis shall be the property of the Bombay Medical Union.

All other thesis shall be returned if not accepted provided the return postage expenses are paid in advance by the writer.

In the award of the prize to the successful candidate, the decision of the committee shall be final.

THE DR. SIR BHALCHANDRA KRISHNA MEMORIAL GOLD MEDAL

The Jt. Hon. Secretaries, Bombay Medical Union, Blavatsky Lodge Building, French Bridge, Chowpatty, Bombay, write:

Members of the profession are invited to submit a thesis or a paper by the 30th June, 1950 for submission to a Selection Committee for making the above award.

The thesis should be designated by a motto instead of the writer's name and should be accompanied by a sealed cover containing the name of the writer and his Post-Office address.

The name of the Prize, the year of competition, the subject of the thesis and the writer's motto should be superscribed on the cover. Two or three copies of the thesis should be submitted.

The thesis or paper shall have to be read by the prizeman on the day of the award at a meeting of the profession.

ASSOCIATION OF PHYSICIANS OF INDIA

The Annual Conference of the Association of Physicians of India will be held at Lucknow on the 11th, 16th and 17th March, 1950. There will be symposia on:

(1) Ankylostomiasis; (2) Peptic ulcer & (3) Treatment of malaria.

There will also be papers on other subjects read at the Conference. All physicians and those interested in the above subjects are invited to contribute papers and take part in the discussions and in the Conference.

Those wishing to attend the session should write to Dr. S. S. Misra, 12, Clyde Road, Lucknow for accommodation.

INDIAN ASSOCIATION OF PATHOLOGISTS

The Indian Association of Pathologists was inaugurated at the Lady Hardinge Medical College, New Delhi, in November, 1949. About 30 pathologists from all parts of India attended the inaugural meeting in which the constitution of the Association was adopted and the following office-bearers were elected for the year 1949-50:

President—V. R. Khanolkar, *Secretary*—P. N. Wahi, *Jt. Secretary*—G. L. Sharma and *Treasurer*—H. Patil.

CANCER HOSPITAL IN CALCUTTA

India had many problems to solve for the prevention and cure of disease, and it was of fundamental importance for her not to depend on foreign industries for the production of substances such as vaccines and antibiotics, said Mme Joliot-Curie, opening the Chittaranjan Cancer Hospital in Calcutta on Jan. 12, 1950. She also laid the foundation stone of the nurses' home of Chittaranjan Seva Sadan.

Dr. Roy, West Bengal Premier, presided, Dr. S. P. Mookerjee, Minister for Industry and Supply, Government of India, was among those present.

Mme Joliot-Curie went round wards and departments of the Cancer Hospital and showed particular interest in the million-volt X-ray unit there.

She said that, since the first use of radium for the therapeutics of cancer which was made in France a few years after the discovery of radium, many big

centres had grown for the treatment of the disease by radiation. It was a great pleasure for her to see the birth of a big medical institution for cancer treatment in India.

Some of the diseases with which India was confronted were specially frequent or dangerous in tropical countries. She had seen in Bombay a big institute devoted to the preparation on a large scale of vaccines against many epidemic diseases and against the venom of snakes. She had also heard that India was going to undertake the manufacture of penicillin.

Cancer was not a tropical disease, but occurred frequently everywhere. It seemed to her that India had many superficial cancers which were among those that could be cured relatively well by the use of radium or X-ray. The work of the Cancer Hospital should therefore be particularly fruitful.

Big medical institutions were useful not only for routine medical work, they must also be centres of medical research. A centre for the preparation of vaccines could improve the efficacy of known vaccines or make new ones, and that for the manufacture of penicillin or streptomycin could study the action of these anitibiotics on different diseases or perhaps find new antibiotics.

In a centre for the treatment of cancer, even simple statistics of the origin of cases and their treatment could be the basis of important medical progress. Dr. Khanolkar of Bombay had shown that many cases of cancers of skin or tongue were due to permanent irritations resulting from particular ways of living and could be easily avoided.

Comparison of the statistics of the nature of cancers in a tropical country, whose conditions of life were different from those in Europe and America, could help to throw light on the origin of cancer and perhaps lead to means of prevention of the disease.

Mme Joliot-Curie hoped the Cancer Hospital would devote some of its activity to the research essential for the progress of therapeutics and of pure science.

Dr. Roy recalled how out of charities Chittaranjan Seva Sadan and now the Cancer Hospital had grown up. It was in the fitness of things that Mme Joliot-Curie, who by her researches had established the reputation of being one of the foremost scientists of the world, should open the hospital.

He referred to Dr. N. R. Dhar's donation of Rs. 1,00,000 for the construction of a nurses home in Chittaranjan Seva Sadan and said that no hospital could run properly unless there was a fully equipped nursing staff.

Dr. Subodh Mitra, Director of the Cancer Hospital, said that after working for 10 years they had been able to establish the hospital. It had grown almost entirely out of public donations. The present building would not only accommodate 150 beds but also house the Pathological and Roentgen and Radium Institutes.—The *Statesman*.

INTERNATIONAL EXHIBITION OF MEDICAL PHOTOGRAPHY 1950

The Royal Photographic Society, Medical Group, sends the following note:

Early in the summer of 1950 we shall be holding our Annual Exhibition, and world-wide invitations to medical photographers will be sent out in the sincere hope that all who possibly can will submit their work for selection.

The Committee of the Group feel that the time is now opportune for making their annual exhibition international, and the great benefits will accrue both to the photographers and to the science of Medical Photography.

Prints from abroad may be unmounted, and these will afterwards be put on to standard 16 in.×20 in. and 12 in.×15 in. mounts. The necessary descriptive matter must be sent with the prints.

Entry forms may be obtained direct from Kenneth G. Moreman, Honorary Secretary, Medical Group, 16, Princes Gate, London, S.W. 7, or from distributors appointed by the organisers.

DISTRIBUTION OF AUREOMYCIN AND CHLOROMYCETIN

While these two antibiotics are scarce and costly the Ministry of Health, England is purchasing all the available supplies and will distribute them through the regional hospital board centres previously used for distributing streptomycin:

For the present the use of these drugs will be restricted to the treatment of the following condiitons:

Aureomycin—Suspected cases of ornithosis; proved cases of undulant fever (brucellosis) and lymphogranuloma inguinale; and severe cases of atypical pneumonia in which there is good reason to believe that the cause is a virus.

Chloromycetin—Suspected cases of ornithosis; proved cases of undulant fever (brucellosis), lymphogranuloma inguinale, typhoid fever, paratyphoid fever (severe), and salmonella septicaemia.

These categories may be added to from time to time in the light of current expert advice.—*Lancet*, **2**:955, 1949.

THE HYGE B.C.G. STATISTICS

Dr. Tage V. Hyge's school girls in Denmark promise to become as famous in the history of B.C.G. vaccination as Dr. Heimbeck's nurses at the Ullevaal Hospital in Norway. In both cases several of the requirements of an experimental investigation are fulfilled, and in both cases follow-up studies are being pursued. It will be remembered that Hyge's school girls, numbering several hundreds, belonged to a large school in Copenhagen where the story began in October, 1941, with the discovery of a case of cavernous pulmonary tuberculosis in a girl of 15. This discovery led to systematic tuberculin and other investigations of the scholars and their teachers. Early in 1943 there was an almost explosive, influenza-like, outbreak of tuberculosis in the school, and the source of the infection was found to be a teacher. The children were classed according to whether they were originally tuberculin-positive or tuberculin-negative, the latter being put in two groups according to whether they were or were not vaccinated with B.C.G. Like Heimbeck, Hyge found a low tuberculosis-rate among the originally tuberculin-positive girls, and among those who, originally tuberculin-negative, were vaccinated with B.C.G. On the other hand, the tuberculosis-rate was very high among the originally tuberculin-negative who were not vaccinated with B.C.G.

From time to time Hyge has published further observations, and now, after an observation period of five years, he brings his figures up to date. Of the 94 originally tuberculin-negative girls exposed to infection and not vaccinated with B.C.G., 70 became tuberculin-positive, and 41 of them showed definite signs of tuberculosis. Of the 106 originally tuberculin-negative girls exposed to infection and vaccinated with B.C.G., only 2 developed pulmonary tuberculosis. Of the 105 originally tuberculin-positive girls exposed to infection, 4 developed pulmonary tuberculosis. Hyge concludes: "We ought therefore to vaccinate with B.C.G. all who are tuberculin-negative."—*Lancet*, **2**:290, 1949.

REPUBLIC DAY MESSAGE FROM THE PRESIDENT, I.M.A.

Dr. Chaman Lal Mehta, President, Indian Medical Association, gave the following message to the medical profession on 26th January, 1950:

"This day ushers in India, New Era full of hope for country's health and prosperity. I appeal to my colleagues in the medical profession in India to resolve on this memorable occasion to serve the people—not only by ministering to the sick—but by guiding them in living hygienic life, preventing disease and promoting positive health, and thus bring back to the profession the dignity, trust and love of the people once enjoyed by it."

CORRESPONDENCE

The Editor is not responsible for any views expressed by contributors

HYDROGENATED VEGETABLE OIL

Sir,—Will you or your readers let the undersigned know through the columns of this Journal:

(1) The food value of hydrogenated vegetable oils commonly known as 'Vanaspati' or 'vegetable ghee' as compared with the same volume of other edible fats such as butter, ghee, margarine, mustard oil, etc.

(2) Is there any harm, if the 'vegetable ghee' entirely replaces the other forms of edible fats used in our food or in our cooking? In the present process of manufacture, does it retain any of the fat-soluble vitamins?

(3) Is there any harmful impurity in the common samples available in the market for sale? Can we advise people to resort to 'vegetable ghee' in place of mustard oil now commonly adulterated with Argymone seeds and mineral white oil?

(4) Is there any easy test for detecting hydrogenated oil when it is mixed up with butter or ghee? —I am, etc.

J. C. BHATTACHARJEE, L.M.P.
Secretary, I.M.A., Siliguri Branch

Siliguri
10-12-49

TYPHOID FEVER IN CHILDREN

Sir,—With reference to the article on typhoid fever in children by Sri K. M. Sukhtankar in the November 1949 issue of the Journal of the Indian Medical Association, we wish to make the following remarks:—

We agree to the full diet; but as a routine penicillin with sulphathiazole is useless in the regular course of the disease. It is only useful in some cases of complications especially so after the regular course of the disease is over *i.e.*, about three weeks. The article in question does not state when the special treatment was adopted. If it were started in the late 2nd week and temperature going down in 7 to 10 days, it does no credit to the treatment as typhoid fever is a self-curing disease. We are afraid the article is misleading. We would request the author to give more details.—We are, etc.

T. K. DAYALU, B.A., M.B. B.S.,
AND
S. S. JAYARAM, M.B. B.S.

Bangalore
2-12-1949.

TYPHOID FEVER IN CHILDREN

Sir,—Let me take the opportunity to write a few lines with reference to an article in your journal, November 1949 about 'Typhoid Fever in Children'.

I have really appreciated this treatment in practice in a few cases, as I have started the treatment with penicillin and cibazol very recently in three cases.

As regards the diet I do not quite agree as the condition of the patient is not very much for a strong solid food as in the normal case. It may prove rather fatal as there is very severe toxæmia and there is very high fever and the strain on the intestines may cause perforations. It need not necessarily if the general condition of the patient before the fever is healthy. I would suggest nutritious liquid diet like soup, with liver, vitamin B complex and vitamin C injections which may help healing of the ulcer and rapid recovery of the case.—I am etc.

G. N. MENON, L.M.P.,

29-11-1949,
Kallai Road, Chalapuram.

TREATMENT OF WHOOPING COUGH

Sir,—I am here writing this letter with reference to above article written by Dr. A. B. Roy in *J. Indian M.A.*, July issue, p. 383. Dr. A. B. Roy writes the following lines:

"Whooping cough is a disease of infants and children. There is one almost identical condition in adult which is prevalent now-a-days—tropical eosinophilia. Though these diseases simulate each other very much in their clinical features, the blood picture is different".....

I like to comment on this remark. In my opinion the present available text books on infectious diseases do not discuss that whooping cough should be differentiated from tropical eosinophilia. Personally even though I have got little experience, I have not seen any case which was tropical eosinophila but was taken as whooping cough.

Dr. Roy in the same article gave statistics of cases which were treated. I would like to know the number of cases of tropical eosinophila which were taken as whooping cough but ultimately proved to be tropical eosinophilia after differential count.

If it is not so I will be obliged if Dr. Roy gives me references where this statement has been confirmed.—I am etc.

L. D. PURANIK, L.C.P.S., D.C.H.,

5-11-49
590, Kasba Peth, Poona 2.

EPIDEMIC DROPSY

Sir,—I am sending for publication in your journal the following resolutions passed at a general meeting of the Indian Medical Association Banaras Branch held on Wednesday 13-12-49 at 5 p.m. at Marwari Hospital specially convened to discuss the increasing menace of Epidemic Dropsy in the city.

"It was resolved that the Government be requested to institute extensive research on epidemic dropsy.

"The medical practitioners be requested to notify the disease.

"The Govt. should certify the quality of mustard oil which is good for human consumption.

"That strict vigilance should be exercised by the Government on the purity and quality of the mustard oil on sale.

"The health department of the Government should start intensive propaganda against epidemic dropsy and its causative factors and preventive measures through post, press and over the air."—I am etc.

A. K. MUKERJEE, B.SC., M.B.

16-12-49.
Banaras.

PITY LICENTIATES

Sir,—I have read the letter of Dr. Bhidhu Bushan Mukerjee in the November issue of your journal, page 66, but I confess I do not understand what he is driving at. I would, however, like to clarify certain issues raised by him. In the 1st paragraph he says, "My Licentiate Brothers", then in the 2nd paragraph he says "they wanted to commit suicide." So evidently Dr. Mukerjee is a licentiate and yet does not want to identify himself wholly with the licentiate. Though I am a licentiate I am addressing this letter in an impersonal way. His statement that the licentiates wanted to commit suicide is wrong. The licentiates did not want to commit suicide nor did they ever attempt it. But they wanted to practise birth control, to stop the production of licentiates whose education was considered to be a little inferior to the degree standard. This act does not deserve the cheap gibe of Dr. Mukerjee that the licentiates dug their own graves. He further says that there are no more grievances for the licentiates since they were given commissions in the last war, have chances of becoming graduates now, and because the Indian Medical Council Act is likely to be amended to include the licentiates therein.

Regarding the above three points I would like to point out the drawbacks in them. Regarding commissions in the army, it is a fact that during the last war licentiates were invited to take up commissions, but now they are not wanted even for temporary commissions. Though a few licentiates are taking the condensed M.B. course, still all those who want to take it are not able to do so on account of the restricted number of seats allotted to them in the various medical colleges and any delay in this matter will prevent many licentiates to do so. Regarding the amending of the Indian Medical Council Act, the present idea of the powers that be, seems to be, that licentiates may be recognised by being placed in the All-India Medical

Register and treated as scheduled castes. Whether the licentiates will be treated like graduates in the matter of Civil and Military employment, post-graduate studies and scholarships for research in this country itself, is not yet clear. Under the above circumstances the grievances of the licentiates have not yet been redressed. So they have legitimate reason to agitate for bettering themselves.

Though his statement that the graduates are in the majority in the Indian Medical Association is questionable, if all the licentiates join the Indian Medical Association they will be a powerful phalanx for a number of years to come. There is no doubt that the united voice of the licentiates and the graduates raised through the Indian Meidcal Association would be better heard than the individual voice of the licentiates alone and so amalgamation of the two associations is very desirable. But the graduates section of the Indian Medical Association should welcome the licentiates without any mental reservation or with a superiority complex.—I am etc.

(Dr.) P. A. S. Raghavan.

8-12-1949
Trichinopoly

PITY LICENTIATES

Sir,—I have to draw your attention to the above published in the Journal of the Indian Medical Association, Vol. 19, p. 66, and wish to record that such writing should not be incorporated in the journal of the I.M.A. as:

The actual tone and sarcastic language of the writing on the work of A.I.M.L.A. would widen the gulf that we wish to bridge between the two associations, by trying about amalgamation.

The caption itself is objectionable and the matter is not consistent with the aims and objects of the journal of the I.M.A.—rather it is a mistake of the Editor of the same to publish such letters at such a juncture.

Will the Editor of the Journal of I.M.A. take a note of this for future guidance, since local branches have protested to me?—I am etc.

Jamiatram B. Desai,
President,
All-India Medical Licentiates Association.

14-12-1949,
Ahemedabad.

The Editor is not responsible for any views expressed by contributors—Editor, *J. Indian M. A.*

HALF-BAKED LICENTIATES

Sir,—Regarding the letter "Pity Licenciates" published in the *J. Indian M. A.*, **19**:66, 1949, I like to state as follows:—

1. I wish the writer's words did come true and as he has suggested, let all licenciates commit "Harikiri", it is the interest of medical profession as a whole. The writer should not express surprise by the agitation of this down-trodden class if they claim for their legitimate rights. He must be aware of the facts and I presume he is not a new comer to the field. It is partly a fact that due to constant agitation through A.I.M.L.A. platform most of the schools are abolished. It is not a fact that the schools are abolished in the interest of the class but due to exigencies of circumstances. Schools at Ludhiana, Jalpaiguri, and some sham schools at Nagpur are going strong to suit the needs of the Provincial governments without caring for the opinion of the "centre" or the class.

2. It is also partly a fact that "Souttar Commission" had to throw open the doors of I. A. M. C. to Licenciates not due to their insistent demands but due to grave administrative necessity. Sufficient number of graduate doctors were not available to serve the need of the army. During the life and death struggle of the British Government in the World War No. 2 Mr. Churchill wanted even conscription of man power and doctors in India which were carefully avoided due to political reasons. The political masters of the day have thrown out the licenciates from the Army with bogey of international complication. Merit and efficiency have gone with the wind.

3. Putting the name in the schedule 'A' of register does not solve the problem. Medical graduates of two years' standing are offered scholarship by the centre but not the licentiates of merit of many years standing.

4. Vaids, Hakims and Homœopaths of the day are recognised due to political reasons in the garb of cheap rural medical relief. There is no difference between licenciates and graduates in the field of private practice. Barring Government services and insurance companies the licenciates are serving the people admirably and earning their worth.

5. Unless genious of I.M.A. formulates practical policy and recommend to the authorities to make this half-baked into full baked basic M.B., B.S. by demanding practical post-graduate course of licentiates of short duration and conferring degree of M.B.B.S. to the deserving, thus bringing uniformity in the class which will raise one voice, the disaster is coming.

If democracy is the rule of the majority then a "Mahamahopadya Vaid Shashtri" should be the Director-General of Health, Government of India.—I am, etc.

P. R. DAS GUPTA
Ex-Secretary I.M.A.,
Simla Branch,

2-12-49.
Simla.

REVIEWS

THE BEGINNINGS OF MODERN MEDICINE IN MADRAS: THE DAWN OF MODERN MEDICINE IN MADRAS—By D. V. S. Reddy, Thacker, Spink & Co., (1933) Ltd., 1947. Rs. 5/-, pp. 251-xiv.

Dr. Reddy is one of those persons with original ideas who are doing very good service in trying to focus the attention of the medical profession to medical history in India and this book is a fit contribution towards this subject. The book is divided into 19 chapters and describes the history of modern medicine in Madras from 1600 to 1863, a period of 263 years. Even a cursory glance shows what an amount of patient research has been done in collecting these data from a huge mass of forgotten documents. We congratulate Dr. Reddy for this pioneer work and we hope this will be followed by other works very soon.

N. G. MOJUMDER.

BACTERIAL AND VIRUS DISEASES—By H. J. Parish, M.D., 1948, pp. 168. Published by E. & S. Livingstone, Edinburgh, 16 & 17, Teviot Place, Edinburgh. Price 7s. 6d.

This useful little handbook brings together the theoretical concept of immunity, methods of preparation and standardization of antisera and biologic preparations, methods of diagnosing susceptibility and instruction regarding serologic treatment of bacterial and virus diseases. This handbook fills up a gap in the medical literature and will be of much use to the busy general practitioner.

N. G. MOJUMDER.

ARTERIAL HYPERTENSION—By David Ayman, M.D. Edited by Henry A. Christian and reprinted from Oxford Loose Leaf Medicine with the same page numbers as in that work. Oxford University Press, New York.

Essential hypertension is defined by Dr. Ayman as "an inherited disease, in which the only demonstrable primary change is an elevation of blood pressure due to a functional generalised spasm of the arterioles with the cause of the constriction still completely unknown."

Even without this knowledge of its actiology much information has been gathered during recent years regarding its background, progress and prognosis. These data are valuable clinical material. The personality and reactions of the group, before, and during the development of hypertension are to be understood. These patients are high-strung and serious individuals, hyperactive in response to their surroundings, their problems, their worries and their medical advice. This make-up and background make difficult the proper evaluation of any form of treatment given to patients with hypertension. Unless the symptoms and fluctuations in blood pressure are studied before any treatment is given, one is not in a position to decide the value of any form of treatment, which is being investigated. The name of drugs claimed to be effective in controlling hypertension is legion. As a rule, such studies are poorly controlled because there has not been adequate and sufficiently prolonged observation of blood pressure in the patient under many conditions before adding to all other features of management some special form of treatment which is to be evaluated, and an insufficient number of patients are subjected to such study.

Dr. Ayman is of opinion that the common element is the enthusiastic giving or doing of something to a patient, it is "treatment" regardless of its nature. The effect of "treatment" was studied in a group of 40 patients who were prescribed seriously and enthusiastically 10 drops of dilute hydrochloric acid to be taken in half a glass of water 15 minutes before meals 3 times daily. The patients were ambulatory and were seen at weekly intervals. They were "treated" over periods of 1 week to 4 months. The amazing finding was that 33 of the 40 patients showed definite improvement, giving 80 per cent success. Only one explanation for the successful results in the treatment of symptoms in hypertension appears at all possible; namely that the symptoms associated with essential hypertension are so frequently of psychic origin that they may be relieved by suggestion inherent in any drug or method utilized by the physician. This is known as transfer effect in the psychiatric language.

In this book are described in detail what controls are necessary for proper evaluation of the effectiveness of methods of treatment of essential hypertension and in this light Dr. Ayman has subjected to critical analysis such methods of treatment as restricted dietaries, potassium thiocyanate in doses checked by determination of levels of the drug in blood and sympathectomy, the only forms of treatment that seem to be of any real value.

We hope this book will be very valuable to physicians toward intelligent and effective management of their patients with hypertension.

B. P. NEOGY.

A PSYCHIATRIST LOOKS AT TUBERCULOSIS

—By Eric WittKower 1949. Demy 8vo., pp. 152. Published by the National Association for the Prevention of Tuberculosis—Tavistock Square, W.C. 1, London.

In no other disease it is more important to realise that a tuberculosis patient possesses a diseased organ and also a sick personality. Although every careful physician assumes the interrelation of this aspect of the disease, this valuable possession has always

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'Benzedrine' Inhaler is strikingly effective in reducing the congestion accompanying head colds. When used as directed, it does not damage inflamed membranes, and is "probably the least irritating of any method for shrinking the nasal mucosa . . ." (Shambaugh, G. E., Jr.: J. Iowa M. Soc. 31:373.)

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P.O. Box No. 680 Bombay. P.O. Box No. 2070 Calcutta. P.O. Box No. 29 Fort Cochin

remained a personal possession and this had never been extensively submitted to modern research.

This book forms the result of investigation promoted by Napt from the modern psychiatric point of view. The observations and conclusion are now offered to all who are interested in the welfare of tuberculous patients.

B. P. NEOGY.

MEDICAL X-RAY PROTECTION UP TO 2 MILLION VOLTS—Handbook 41. 1949, pp. 43. U. S. Department of Commerce. National Bureau of Standards. For sale by the Superintendent of Documents, Washington 25 D.C. Price 15 cents.

This pamphlet contains recommendations which, are intended primarily for the protection of the radiation worker and not for the patient. However, with the increasing use of radiation and of materials emulting radiation, it is necessary for the medical profession to exercise great caution and restraint in the use of x-rays for diagnosis and the treatment of non-malignant diseases.

The general recommendations are—

(*a*) The beam of radiation reaching the patient should be as small in cross section as is essential for the examination especially in fluoroscopy.

(*b*) The gonads should be protected whenever possible either by limiting the size of the beam or by local shielding.

(*c*) Dermatologists and radiologists should avoid as much as possible the use of radiation in the treatment of benign conditions of hands such as fungus infections in the case of people handling radioactive materials or otherwise being occupationally exposed to radiation. Various datas are incorporated in this useful pamphlet.

B. P. NEOGY.

TRANSACTIONS OF THE ASSOCIATION OF LIFE INSURANCE MEDICAL DIRECTORS OF AMERICA: 57TH ANNUAL MEETING —Edited by James R. Gudger, 1949. Vol. xxxii., pp. 241. Press of Recording and Statistical Corporation, New York City 1949.

The problems of medical selection are not easy with the increasing knowledge of human impairment in changing conditions of life and work. It is difficult for any medical man to keep himself informed about these which affect mortality and morbidity. So an annual meeting, whose transactions are published in this volume, will surely benefit thousands of practitioners all over the world.

There are discussions on asthma, chronic cholecystitis, epilepsy, insurability of atomic energy workers, orthopaedic impairments and osteomyelitis.

Conditions of insurance in this country widely vary from that of U.S.A. Disability claims due to disease like tuberculosis are inadmissible in our country.

In the U.S.A. medical selection considers what legitimate safeguards for these proposing to write insurance without extra premium, could be given in case of atomic energy workers. Interesting questions were asked in discussions on duodenal ulcer. The following are some of them:

1. How do you rate applicants with duodenal ulcer, who have not been disabled, have not had haemorrhage, or have not been hospitalised?

2. How do you rate duodenal ulcer applicants who have had haemorrhage or have been hospitalised?

3. How do you rate duodenal ulcer applicants who have had surgical treatment?

4. How do you differentiate in rating between gastroenterostomy and vagotomy?

I think except the first question, the rest are not likely to arise in our country.

B. P. NEOGY.

SICKNESS IN THE POPULATION OF ENGLAND AND WALES IN 1944-1947—By Percy Stocks. 1949, pp. iv+52. H.M. Stationery Office, London. Price 1s.

Minor illness causes great economic loss as well as individual and social disturbance. It is difficult to measure, not easy even to define.

The need for some continuous measure of the total amount of sickness in the population is considerable, if national plans for further improvements in social medicine are to be soundly based, if there is to be an effective appraisal of the National Health Service.

In this brochure Dr. Stocks first defines his terms and then examines the value and limitations, as indices of morbidity, of information derived from notifications of infectious diseases, from the sample sickness survey carried out monthly since 1943 and from statistics of special food allowances.

B. P. NEOGY.

PHARMACOPOEIA AND INTERNS' MANUAL —R. G. Kar Medical College Hospitals. Compiled by B. B. Roy, M.B., under the direction of a committee appointed by the Council, Fourth issue, 1949. Pp. 224+x. Published by the Office of R. G. Kar Medical College, 1, Belgachia Road, Calcutta. Price Rs. 3-8-0.

It is gratifying to find this pharmacopoeia brought up-to-date after 8 long years. The small book which can slip into the pocket is divided into two parts—the first part contains the usual prescriptions and the second deals with miscellaneous subjects like the child and its management, poisoning, technical procedures etc.

The special feature of this issue is the valuable note at the end of prescriptions. The compiler is to be congratulated for such a useful handiwork.

N. G. MOJUMDER.

CURRENT MEDICAL LITERATURE

Cough as a Symptom of Cardiovascular Disease

Currens and White (*Ann. Int. Med.*, **30**:528, 1949) stress on the importance of cough in certain patients with cardiovascular disease and present illustrative cases of several common types of heart disease in which cough was a prominent symptom. Pulmonary congestion resulting from either left ventricular failure or mitral stenosis is the most common cause of cough. Other conditions, namely, aneurysms of the aorta, congenital vascular rings, and pericardial disease, may cause cough as a prominent symptom. Pulmonary embolism with infarction, which so commonly complicates heart disease, especially when the heart fails, may cause coughing as well as dyspnœa and pain; it should always be looked for in such cases. Finally, anxiety alone may at times account for cough in patients with or without heart disease.

Dysphagia and Mitral Valve Deformity

Sampson and others (*Ann. Int. Med.*, **30**:662, 1949) write that dysphagia is a rare complication of mitral valve disease; the case presented is the eighth with this condition reported in the past 20 years.

Review of previously described cases bring into prominence the marked enlargement of the left ventricle, the presence of mitral insufficiency and congestive failure in these patients, and the alleviation of dysphagia when management succeeds in reducing the size of the left ventricle. The essential mechanism in the production of a hugely enlarged left auricle appears to be not mitral stenosis per se, but marked insufficiency or incompetency of the mitral valve.

It is suggested that in addition to the two common explanations of vomiting during congestive failure, *i.e.*, congestion of the protal circulation and digitalis intoxication, a third mechanism may occasionally be involved, namely, compression of the esophagus by an excessively enlarged left auricle.

Transient 'O' Diastolic Blood Pressure

Stein (*Ann. Int. Med.*, **30**:615, 1949) reports five males, aged 19 to 27 years, exhibiting the syndrome of 'O' brachial diastolic pressure, normal or elevated popliteal pressure and tachycardia.

Four of the five showed definite psychoneurotic traits with various manifestations of autonomic nervous system imbalance.

None presented evidence of any organic cardiac disease despite extensive studies, including fluoroscopy, roentgenography and electrocardiography.

It is important that this benign syndrome be distinguished from aortic insufficiency. The absence of a diastolic murmur, cardiac enlargement, and of low diastolic pressure in the lower extremities, together with the transient character of the indirect 'O' diastolic reading in the arms, will easily preclude an erroneous clinical diagnosis of aortic insufficiency. The history is often of assistance. At times electrocardiograms, roentgenograms and serologic studies may provide additional information.

Diabetic Indigestion

Bassler and Peters (*Ann. Int. Med.*, **30**:740, 1949) write that digestive disturbances, relatively mild in nature but present over long periods of time are occasionally encountered in mild cases of diabetes.

Often the underlying diabetic state is not discovered or considered significant and the patient presents a puzzling picture.

The condition which is presented as diabetic indigestion does not appear to be due to an acidosis or to any organic condition. Treatment directed toward proper control of the diabetes rapidly relieves the patient of all digestive disorders. If symptoms persist after the diabetes is controlled, search elsewhere for the cause of the indigestion is in order.

Unusual Observations in Post Transfusion Reactions

Digilio and Hochwald (*Ann. Int. Med.*, **30**:745, 1949) report two cases of fatal transfusion reactions with autopsy findings.

Although death occurred in a matter of hours in one case and after one week in the other, the pathologic findings were similar. Widespread visceral œdema was seen in both cases.

Transfusion reactions and death occurred after 150 c.c. of incompatible blood were administered in one case and 250 c.c. of blood in the other.

The patho-physiologic aspects are discussed. The possible effect of prior reticuloendothelial disease as a conditioning factor in the production of widespread visceral involvement in transfusion reactions is mentioned.

Changes in therapy are considered.

The cases presented in this report show not only renal pathologic lesions seen in post blood transfusion reactions and changes in the liver, but also generalized and widespread visceral and tissue œdema. The findings in case 1 indicate that this œdema is not the result of renal failure, since sufficient time could not have elapsed for this development. Case 2 appears to fall into the same category, in view of the evidence of water imbalance causing hidden tissue œdema noted long before failure of the kidney and liver parenchyma became clinically apparent. It is possible, if not probable, that the autopsy findings in these cases were conditioned by the preexisting reticuloendothelial disease. Should this be the case, certain considerations become of paramount importance: (1) The symptoms are usually characteristic of renal disturbance, but clinical and laboratory evidence may reveal liver involvement. In this instance the term hepatorenal syndrome is permissible. However, the arrival at this conclusion should suggest that visceral (parenchymal) involvmeent may not be confined to the kidneys and the liver. It may involve other organs: heart, brain, and lungs. (2) The occurrence of widespread interstitial œdema makes one wonder whether the usually recommended therapy in cases of hemolysis due to incompatible blood transfusion should be employed in cases such as those here reported. The forcing of fluids, especially where oliguria or anuria exists, would tend to increase tissue œdema. It would seem to these writers that technics designed to prevent and control tissue œdema would be desirable. Thus, plasma and, perhaps, hypertonic solutions, may be employed. The use of mercurial diuretics should be considered to mobilize extrarenal water. Substances capable of improving capillary function, such as ascorbic acid, adrenal cortex hormone, and calcium, may be employed with benefit.

Cytologic Diagnosis of Carcinoma of the Œsophagus and Cardia of the Stomach

Anderson and others (*Proc. Staff Meet. Mayo Clin.*, **24**:245, 1949) present an analysis of 50 consecutive positive smears of secretions from the œsophagus and cardia of the stomach. The technics of collection of the material, the

preparation of the slides and the characteristic of malignant cells were discussed.

In 14 positive smears the carcinoma was primary in the œsophagus, and in 26 it was primary in the cardia of the stomach. There were no proved false positive results. The œsophagoscopic biopsy was negative in 8 cases in which the smear was positive, whereas the reverse (negative smears and positive biopsy) was found in only 3 cases. Of 20 cases in which operation was performed the cytologic examination was the only microscopic preoperative proof of carcinoma in 6. In all of these the presence of a malignant lesion was proved by biopsy or resection. The cytologic smear proved to be of more value in the diagnosis of carcinoma of the cardia of the stomach than in carcinoma of the œsophagus.

Chloromycetin in Typhoid Fever

Until the introduction of chloroamphenicol ('Chloromycetin') there was no satisfactory chemotherapeutic agent for typhoid fever. Some of the sulphonamides were reported to protect mice infected with lethal doses of *S. typhi;* and the less soluble sulphonamides, such as sulphaguanidine and succinylsulphathiazole, are reputed to relieve the abdominal symptoms, though the evidence has never been very convincing. In high concentrations penicillin and streptomycin inhibit *S. typhi,* but they do not clearly alter the course of the disease.

Initial studies on the antibiotic, chloramphenicol, showed that it had a wide antibacterial spectrum and was particularly active against rickettsial and gramnegative bacterial infections, including those produced by members of the salmonella group. The original report of Smadel and his co-workers (*Science,* **108**:160, 1948) on the beneficial effect of chloramphenicol on typhoid fever in Malaya was followed by that of Woodward and his colleagues. Favourable reports have been published in this country by Murgatroyd (*Brit. M. J.,* **1**:851, 1949), Bradley (*Lancet,* **1**:869, 1949), Lomax (*Brit. M. J.,* **2**:911, 1949), Douglas (*Lancet,* **2**:105, 1949) and Patel *et al* (*Brit. M. J.,* **2**:908, 1949); in the U.S.A. by Foster and Condon (*J. A. M. A.,* **141**:131, 1949). These repots deal, however, only with isolated cases or small noncontrolled groups; and so that results, though usually impressive have had to be interpreted cautiously. The virulence of strains of *S. typhi* varies widely; in some outbreaks the illness is severe and the mortality high, while in others it is mild and runs a relatively bnign course. Moreover, in assessing results the effect of previous inoculation has also to be borne in mind. With the synthesis of chlorampenicol early this year in the Detroit laboratories of Parke, Davis & Co. and the consequent improvement in supplies, it has been possible to treat larger groups. Woodward (*Ann. Int. Med.,* **31**:53, 1949), of Baltimore, has now treated 21 cases in which the diagnosis was confirmed by blood-culture. The patients were treated in the active phase of the disease, the course of which was followed by observations on the clinical condition, the duration of fever, and repeated blood, stool, and urine cultures. By the 3rd day clinical improvement was apparent, with relief of headache, cough, and delirium, and disappearance of rose spots; the average duration of fever from the start of treatment was 3½ days. Nevertheless, some patients continued to harbour the typhoid organism and relapses ensued if the drug was given for less than 8 days.

Cook and Marmion (*Lancet,* **2**:975, 1949) describe the results obtained with chloramphenicol in 14 cases treated in the British Military Hospital at Fayid, Egypt. Fever began to abate within 24 hours, and had usually disappeared within 5 days; the mental state cleared, toxic symptoms began to disappear, and the appetite returned within 4-6 days. At whatever stage it was given, chloramphenicol seemed to arrest the disease; but Cook and Marmion, like Woodward, remark that intestinal haemorrhage and perforation may still occur. There were no deaths in the 14 treated cases, and 1 death among the 11 untreated; but the results are actually better than this suggests, because all the seriously ill patients received chloroamphenicol. Confirmation of these observations comes from Conti and his colleagues (*Rif. Med.,* **63**:901, 1949), in Italy. In their series of 63 cases there were 4 deaths, 3 of which were attributed to treatment being started too late; and there were 9 relapses.

Chloramphenicol is undoubtedly the best chemotherapeutic agent that we have for typhoid fever. Very few toxic effects have been observed and it does not appear to produce resistant strains. The one drawback is that it does not always sterilize the gut, so that relapse may follow and carriers may still transmit the disease; but this may be a question of dosage. Further trials are needed with larger doses given over longer periods but shortage of the drug is still a limiting factor—*Lancet,* **2**: 1001, 1949.

Treatment of Hepatic Amœbiasis with Chloroquine

Conan (*Am. J. Med.,* **6**:309, 1949) writes that the wartime antimalarial drug research program disclosed a number of highly active compounds of the 4-amino-quinoline series. It seemed logical to determine whether their antiplasmodical activity extended to other pathogenic protozoa. The infection selected for study was that with Endamœba histolytica, because of its relative prevalence among protozoal infections in the New York area. Of the various 4-amino-quinoline derivatives tested for antimalarial activity, the greatest amount of information was available concerning chloroquine, which is 7-chloro-4-(4-diethylamino-1-methylbutylamino) quinoline, and which had proved to be one of the more active and less toxic members of the series. The author used chloroquine successfully in 7 patients with amœbic hepatitis. Chloroquine is a safe and effective chemotherapeutic agent for the treatment of amœbic infections of the liver, being at least as effective as emetine hydrochloride but without the latter's toxicity. The combination of chloroquine with a superior intestinal antiamœbic drug should permit adequate treatment of any amœbic infection and should permit wider use of antiamœbic chemotherapy as a diagnositic and therapeutic test in obscure infections of the liver and intestine.

Treatment of Adults for Epilepsy

Bailey (*Proc. Staff Meet. Mayo Clin.,* **24**:486, 1949) writes that in planning treatment of epileptic disorders, the pattern of seizures should be evaluated and the eitologic factors established. It is the evaluation of these two factors which will determine whether treatment will be surgical, medical or a combination of these methods. In a few cases a correction of disturbances in metabolism is of prime importance. Dilantin sodium and phenobarbital are still the safest and most dependable drugs in medical management of a given patient; however, tridione is definitely indicated when there is clinical or electroencephalographic evidence of petit mal or myoclonic attacks. In most instances it should be used in combination with phenobarbital or dilantin sodium, as tridione is not effective in preventing generalized motor seizures; in fact, it may actually increase the tendency toward such attacks. A combination of tridione and phenobarbital or tridione and

dilantin sodium may be the program of choice for psychomotor seizures. In selected cases of petit mal the ketogenic diet may be useful. Mesantoin is a helpful drug in selected cases of focal psychomotor and generalized seizures if dilantin sodium and phenobarbital have not been satisfactory. The potential toxicity of mesantoin and tridione cannot be ignored in deciding on a course of treatment.

A New Drug in the Treatment of Radiation Sickness

Beeler and others (*Proc. Staff Meet. Mayo Clin.*, **24**: 477, 1949) report on a preliminary study on the treatment of radiation sickness in a series of 82 patients using a new drug, dramamine. A control series of 23 patients showed a significantly lower percentage relief of symptoms than did the dramamine group. The authors feel that this inexpensive drug can be safely used both as a therapeutic and a prophylactic agent in the treatment of radiation sickness. The combination of dramamine and pyridoxine in the more severe cases will give the radiotherapist an additional agent for the control of radiation sickness.

The dosage was varied in the beginning of the series in order to determine the most effecti /e therapeutic plan. Maximal effectiveness was obtained when 100 mg. of dramamine was given thirty to sixty minutes before treatment, and repeated one and one half hours after treatment and again in three hours, making a total of 300 mg. Some patients required a total dose of only 200 mg. while others needed 400 mg. In 4 of the patients classified as having a poor result, there was failure to retain and absorb the tablets because of intervening vomiting. This might possibly have been eliminated by giving the drug rectally, although this was not attempted in any case in this series.

The side effects on 82 patients treated with dramamine were:—drowsiness in 15 cases, "bad taste" in 8 cases, paresthesias in 2 cases and nausea in 1 case.

Conservative Treatment of Anuric Uraemia

Bull and others (*Lancet*, **2**:229, 1949) write that three important factors, *viz.*, disturbances of water balance, disturbances in mineral balance and disturbances in nitrogenous balance are to be considered in treating with cases of anuric uraemia. The authors described a regime for the treatment of anuric uraemia which is based on accurate control of water, mineral and nitrogen balance.

During the anuric phase the fluid intake balances the insensible water loss. The diet is completely nitrogen-free and mineral-free and high in calories to depress endogenous nitrogen metabolism. To ensure an adequate and accurate intake of water and calories, a mixture of fat and glucose in water is given by intragastric drip.

On admission of the patient to hospital a stomach-tube is passed through the nose. (Plastic tubes 2-3 mm. in diameter and without a bulbous tip have the advantages over the ordinary Ryle's tube that they are least irritating in the nasopharynx, are easier to pass, and, because of their slightly greater rigidity, are much more difficult to vomit out.) Through this tube the following mixture is dripped at a steady rate throughout the twenty-four hours:

Glucose—400 g., peanut oil—100 g., acacia q.s. to emulsify, (vitamins optional) and water to 1 litre.

All vomit is collected, filtered through lint and returned to the stomach in the same way. This ensures that the fluid intake is accurate, that there is no loss of food by vomiting, and that no loss of electrolytes occurs through vomiting. Serious disturbances of electrolyte balance during the anuric phase may be readily avoided by this regime.

By contrast, however, when diuresis starts, it brings with it special difficulties in management, because the electrolyte-regulating function of the kidney recovers slowly. Urinary losses of the various electrolytes must be made good quantitatively, and, to the basic intake of 1 litre of water fluid is added daily in a volume equal to the urine passed during the preceding twenty-four hours. It is desirable that the drip feeding should be discontinued and superseded by a low-protein diet when the urine output exceeds 1 litre a day.

Because anaemia is known to lead to diminished renal function, fresh packed red cells are transfused if the haemoglobin concentration is below 70%.

If the conservative management is instituted sufficiently early without previous overhydration, diuresis can be confidently anticipated in anuria due to any recoverable rneal lesion. The recovery may be considerably dealyed, and in one of our patients it took place after more than three weeks' extreme oliguria.

Use of Antihistaminic Drugs in Human Tuberculosis

Judd and Henderson (*Ann. Allergy*, **7**:306, 1949) report on the use of antihistaminic drugs in 30 cases of human tuberculosis in which the clinical report was graded roentgenographically and by temperature changes. Character and quantity of sputum, increase in weight, appetite, and feeling of well-being were noted. The greatest improvement occurred in patients with tuberculous pneumonia and other acute exudative lesions which are a result of hypersensitivity. It is significant that, as the lesions progress in chronicity, the antihistamine drugs become less effective.

Mantoux tests were performed on all patients. Purified Protein Derivative Tuberculin, USP, was used prior to, during, and after administration of the drug. In most instances, a gradual diminution in the intensity of the reactions occurred while antihistaminic drugs were taken. The conversion was not always complete, however, and many individuals occasionally showed a slight positive reaction. The reaction became positive within about four to six weeks after administration of the antihistaminic drug was stopped.

Although skin sensitivity is not necessarily a measure of hypersensitivity existing in other tissues, it would appear from our results that clinical improvement roughly parallels suppression of the Mantoux reaction. Three of the patients who showed striking improvement coincident with antihistaminic therapy were taken off this medication. Within two to eight weeks, symptoms and signs of the disease recurred and retrogression of the pulmonary lessions were demonstrable by X-rays.

Reinstitution of therapy was again followed by striking improvement in all three patients. In these patients, the clinical improvement accompanying the administration of the antihistamines strongly points to the therapeutic effectiveness of these drugs even though improvement lasted only through the administration. The combined administration of antihistaminic drugs to suppress the allergic components of the disease, and streptomycin to suppress the growth of the bacillus, may be very effective treatment. Such combined therapy is under active investigation. Additional clinical investigation is in progress.—*U. S. News Letter.*

P.A.S. in Pulmonary Tuberculosis

Nagley and Logg (*Lancet*, **1**:913, 1949) from an analysis of 37 cases of active pulmonary tuberculosis treated with P.A.S. at Grove Park Hospital in 1947-48 observe:

It seems that the main value of P.A.S. in pulmonary tuberculosis is in the acute exudative type of disease, particularly in ill toxic febrile patients.

Such effects as reduction in temperature, fall in E.S.R., gain in weight, and a feeling of well-being occur long before radiological improvement can be demonstrated, and once present, they remain during treatment.

P.A.S. and many other chemotherapeutic substance in pulmonary tuberculosis should be given with a definite goal in view, rather than as "just something else to try," and cases for treatment should be chosen accordingly.

Treatment with P.A.S. often has the important effect of making patients fit for collapse therapy.

The relationship of P.A.S. to streptomycin in the treatment of pulmonary tuberculosis is discussed. Patients with acute postoperative and other types of acute pulmonary tuberculosis should not be denied streptomycin, but the value of P.A.S. in such cases, either in conjunction with streptomycin or after its use, should be realised, though P.A.S. must not be looked on as a substitute for the accepted forms of non-chemotherapeutic treatment.

Liver Extract in Herpes Zoster

Gaskell (*Brit. M.J.*, **1**:1037, 1949) reports 20 cases treated successfully with liver extract injections. The herpetic pain was quickly relieved by the treatment although the eruption of herpes zoster may appear without discomfort; the pain associated with the condition is sometimes considerable and post-herpetic neuralgia may occur with such severity and persistence that, as Osler (1898) recorded, it has been known to drive a patient to commit suicide. The treatments recommended have been legion, indulding iron, arsenic, strychnine, gelsemium, valerian, and aconite, as well as the customary analgesics; freezing, liniments, diathermy, and the injection of distilled water beneath the skin have also been used.

Dickie (1946) relieved herpetic pain in prioners of war by use of injections of liver extract, which was the only drug available. The author since had the opportunity of observing the effect of liver extract administered empirically to 20 patients with herpes zoster. In all cases the preparation used was "neo-hepatex", administered intramuscularly. Pain is usually relieved with first injection which may be required to be repeated in some cases to get complete relief.

Treatment of Spider Bites

Miller (*J.A.M.A.*, **139**:1238, 1949) in Queries and Minor Notes writes that as soon as a diagnosis of spider bite is made or if the patient merely complains of a bite which stung a little and then experiences severe cramping in the abdomen or limb muscles 10 to 20 c.c. of calcium gluconate solution is given intravenously. This is given rapidly enough to produce a slight sensation of heat in the tongue and palms of the hands and soles of the feet. As soon as this sensation is felt, the patient will tell you that the cramping has largely ceased. The calcium would give the average adult quicker and more complete relief from pain than ¼ grain (30 mgm.) of morphine. As soon as the calcium is administered, the patient is given a skin test for horse serum and 1 to 2 units of Lactrodectus mactans antivenin is given intramuscularly, depending on the severity of the symptoms and the size of the patient. This is now manufactured by Wyeth. This material is dried and will keep for at least five years, so a physician can keep at least two packages in the office at all times.

The patient is asked to remain either in the office or in town for five to six hours, as 10 to 40 cc. more calcium may be necessary to control the pain before the antivenin neutralizes the effects of the bite.

Ammoniacal Silver Nitrate in Fungus Infections of Nails

Nickerson and White (*Ach. Dermat. & Syph.*, **57**:935, 1949, Ref. *J.A.M.A.*, **139**:1133, 1949) show that the results of treatment of fungus infections of the nails or onchomycosis have been disappointing, although many medicaments and methods have been tried. While conducting experimental work on the physiologic aspects of pathogenic fungi, Nickerson conceived the idea that the problem might be solved by the use of a substance that was fungicidal and which also could penetrate keratin. Such a substance was found in ammoniacal silver nitrate. Penetration by the ammoniacal silver ntrate was demonstrated by roentgenograms of the nails and by histologic study. Patients with fungous infections, proved by scraping and by culture, were treated with weekly applications of an ammoniacal silver nitrate solution. No unfavourable reactions were noted. Nine of 16 patients have been cured. "Cure" is demonstrated by the growth of normal-appearing nail tissue and normal mycologic observations. The remaining 7 were definitely improved and, as on the date of writing, continued to receive treatment. Because of the highly unusual property of penetrating nail tissue, reaching the nail bed and thus exerting direct fungicidal action on the hitherto unapproachable fungi, ammoniacal silver nitrate appears to offer a better prospect for cure of these extremely stubborn conditions than any previous method of treatment.

Antabuse in Alcoholism

Martensen-Larsen (*Lancet*, **7**:1004, 1948) reported results in 83 cases of alcoholism treated with 'Antabuse' (tetraethylthiuramdisulphide). This drug sensitises the patient in such a way that even small doses of alcohol give rise to unpleasant reactions which are attributed to the formation of acetaldehyde in the body. (Hald and Jacobson —*Ibid*, p. 1001). In this as in his earlier paper Martensen-Larsen emphasised the need to supplement such treatment by other means, and he made no attempt to disguise the discomforts, including tachycardia and nausea, that it provoked. Subsequent reports in the Scandinavian medical press are rather fragmentary, but it is stated that antabuse is being tested on a large scale throughout Scandinavia, and that at any rate 4 fatalities have been recorded. In all these cases,

however, post-mortem examination gave good grounds for exonerating the drug, which had been given to patients with undetected diabetes or with other serious ailments. Severe urticaria has been reported, and an alarming account has been given of a fall of blood-pressure from 130/100 to 70/0 mm. Hg. in an alcoholic patient, aged 34 who suffered from pulmonary tuberculosis. (He recovered after intramuscular injections of a stimulant). Another report deals with the problem from the social rather than the clinical angle: it is the record of a workman, born in 1886, who between 1910 and 1947 was continually in and out of goal because of alcoholism and its sequels. In such cases, it is argued, the community is surely justified in confronting the offender with the choice of internment or accepting antabuse treatment.

The Scandinavian man in the street seems to be taking as lively an interest in this subject as the Scandinavian medical profession, with the not inconsiderable risk that the issue of the controlled experiments now being carried out may be obscured.—*Lancet*, **1**:1058, 1949.

Neurosyphilis Treated with Penicillin Alone

Stokes and others (*Am. J. Syph. & Ven. Dis.*, **32**:521, 1948) report on the treatment of neurosyphilis with penicillin alone. In some of the total of 537 cases the fourth year has now been reached, and longer. The results of the serial examination of spinal fluids and parallel clinical data sustain the record of the third year in this series and show a recognizable increase in the proportion of normal, near normal and markedly improved spinal fluids obtained over previous reports. Forty-six per cent of paretic, 60 per cent of taboparetic and 80 per cent of tabetic patients with type III spinal fluids now have normal or near normal spinal fluids. Sixty per cent of patients with meningovascular syphilis and 74 per cent of those with asymptomatic neurosyphilis have a similar status. Like the results present in 1946, though to an even greater degree, these figures suggest that penicillin is superior to other forms of treatment for all types of neurosyphilis and certainly entitled, on the scores of safety, convenience and effectiveness, to first choice.

Psoriasis and Adrenocortical Function

Reiss (*Arch., Dermat & Syph.* January, 1949 Ref. *M. J. Australia*, **2**:364, 1949) presents a preliminary report on a possible steroid hormonal aetiological relationship to psoriasis. He states that hypofunction of the adrenal glands has been favoured by many investigators in this regard. This assumption is based not only on the favourable response to adrenal cortex therapy, but also on the observation that psoriasis is accompanied by vitamin C depletion and responds favourably to its administration. Hypercholesteraemia, generally associated with psoriasis, is considered to be due not only to hypothyroidism and altered hepatic function, but to diminished activity of the adrenal cortex. The author quotes the fact that Block and Rittenberg demonstrated, by using cholesterol tagged with deuterium, that not only bile acids but also progesterone is formed from this steroid. Twenty-five cases of psoriasis were investigated as to a possible adrenocortical disturbance. The author states that the increase in the blood level of cholesterol in psoriasis may be of greater significance than has been hitherto considered. The fact that cholesterol, one of the building stones of cortical steroids, may be present in increased amounts not only in the serum, but also in the adrenals, could be interpreted as indicating a disturbed corticohormonal function. In most cases there is an appraeciable vitamin C depletion; it is conceivable that the depletion may be related to deficiency of adrenal cortex, which normally contains large amounts of vitamin C, which is essential for its normal function. A possible further indication of disturbed corticosteroid normal function is the diminished excretion of 17-ketosteroids. The dimished excretion of 17-ketosteroids in psoriasis may be due largely to diminished adrenal cortical function. The disturbance in keratin formation in psoraisis may well be associated with a disturbed corticoadrenal function. Adrenal cortical tumours with increased homonal production are accompanied by hirsutism. As the chemical content of hair and epidermal keratin is similar, the possibility exists that hirsutism on the one hand and parakeratosis on the other are expressions of hperfunction and hypofunction of adrenal steroid hormones respectively. The author states that the increased sedimentation rate which he found in these cases indicates an infectious or toxis cause for the disease; this seems a likely possibility, based not only on the observation that removal of septic foci is curative in certain cases, but also on the author's recent observation that psoriasis developed in five cases after vaccination against small-pox.

Relief of Dysmenorrhea

Macpherson (*Canadian M. A. J.*, **60**:54, 1949) reports the use of adrenalin and recently antihistaminic drugs in the treatment of cases of severe dysmenorrhea in which the symptoms suggested an allergic condition. The author's aatention was first called to this subject by a paper read in 1931 at a local clinical society which stated that in saece of dysmenorrhea due to "pelvic allergy" (the conditions in the pelvic closely resembled those in the chest in asthma. At that time he was treating a girl thirteen years of age for severe dysmenorrhea at ecery menstrual period, who often required as much ½ grain of morphine and 1/50 grain atropine to relieve the pain. After hearing the paper on pelvic allergy, the author gave the patient an injection of 1 cc. of adrenalin chloride 1:1,000 at the time of her next menstrual period in which the dysmenorrhea was as severe as usual. The pain was relieved within ten minutes and did not return; heremenses were painless for six months, when the administration of adrenalin was again effective; pain did not recur for another nine months. Since that time, the author has treated all cases of very severe dysmenorrhea with adrenalin with uniformly good results. Since the introduction of the anti-histamminic drugs, he has employed benadryl given by mouth in less severe cases of dysmenorrhea, with equally good results. His practice now is to give an injection or 1 cc. adrenalin chloride when called to a severe case of dysmenorrhea. Then the patient is directed to take a capsule (50 mgm.) of benadryl three times a day on the day before her expected menstrual period if her cycle is regular, or if the cycle is less in regular, or if the cycle is less regular, the same dosage (three capsules daily) is to be taken "the moment she knows menstruation is approaching". The author is of the opinion that this treatment for dysmenorrhea should be more widely and the results checked in a larger series of cases.

ERATUM

In February, 1950 issue of the Journal page 171 column 1, line 18, namely, *'Discussions'* is to be omitted.

SUPPLEMENT
Journal of the Indian Medical Association

VOL. XIX, No. 6 CALCUTTA MARCH, 1950

ASSOCIATION NOTES

I. M. A., WORKING COMMITTEE—Proceedings of the 32nd Meeting of the Working Committee of the Indian Medical Association held at Patna on 10-7-1949:

Members Present: Ex-Officio—1. Capt. S. K. Chaudhuri (Banaras) President (In the Chair). 2. Dr. A. N. Ghosh (Calcutta) Senior Vice-President. 3. Lt. Col. Amirchand (Delhi) Hony. General Secy. 4. Dr. P. K. Guha (Calcutta) Hony. Joint Secy. 5. Dr. B. P. Neogy (Calcutta) Assistant Editor of the J.I.M.A.

Representatives from the Provincial Branches—6. Dr. M. V. Krishnarao—Andhra Provincial Branch. 7. Dr. A. D. Mukharj, 8. Dr. A. K. Sen, 9. Dr. J. Majumdar—Bengal Provincial Branch. 10. Dr. Chamanlal M. Mehta—Bombay Provincial Branch. 11. Dr. T. N. Banerji—Bihar Provincial Branch. 12. Dr. B. K. Vinchure—C. P. & Berar & Madhya-Bharat Provincial Branches. 13. Dr. G. V. Joshi—Maharashtra & Karnatak Provincial Branch. 14. Dr. P. A. S. Raghavan—South India Provincial Branch. 15. Dr. M. Atal, 16. Capt. H. N. Shivapuri, 17. Dr. H. Hukku—U. P. Provincial Branch.

Co-opted Members—18. Capt. R. C. Goulatia (Delhi), 19. Dr. G. K. Ghosh (Patna), 20. Dr. P. N. Sinha (Patna), 21. Dr. S. K. Ghosh Dastidar (Patna), 22. Dr. A. P. Mitra (Delhi)—By Invitation.

Item No. 1. Messages of Regret:

The house was informed by the Honorary General Secretary that 1. Capt. P. B. Mukerji (Calcutta); 2. Dr. A. K. Rajagopalan (Madura); 3. Dr. B. Tirumalrao (Vizagapatam); 4. Dr. Faqir Chand Shori (Amritsar); 5. Dr. K. C. Bhattacharji (Allahabad) and 6. Dr. K. K. Sen Gupta (Calcutta)—Co-opted—regretted their inability to attend the meeting.

Item No. 2. Condolence Resolution:

The following resolution was moved from the Chair and passed unanimously, all members standing:—

"The Working Committee of the Indian Medical Association places on record its deep sense of sorrow at the sad demise of the following members of the Association and conveys its heartfelt sympathy and condolence to the members of the bereaved families:—

1. Dr. Siyaber Saran (Chapra); 2. Dr. K. S. Sambasivan (Madras); 3. Dr. S. K. Sundaram (Madras); 4. Dr. J. S. Victor (Madura); 5. Dr. U. Sitaramaswamy Naidu (Kakinada); 6. Dr. S. H. Pandit (Indore) and 7. Dr. Amar Nath De (Hazaribagh).

Resolved further that copies of this Resolution be forwarded to the members of the bereaved families.

Item No. 3. Confirmation of the proceedings of the last Meeting held in Delhi on 2nd April, 1949:

Resolved that the proceedings, as circulated, be confirmed.

Item No. 4. Business arising out of the Proceedings of the last Meeting:

1. 2 (*b*)3(*b*) *Re. formation of Travancore & Cochin Provincial Branches:*

The present position was explained by the Honorary General Secretary.

Postponed:

2(*c*)7(*a*): The opinion of the Journal Committee regarding the purchase of Monotype Press was read by the Honorary General Secretary.

Resolved that as the Press would cost several lacs of rupees, the proposal to purchase it be dropped and that the existing arrangements for the production of the Journal through a firm of printers be continued.

6. *Re. Accounts—Central Office—from October to December 1948:*

The Honorary General Secretary confirmed what he had written to the Honorary Secretary of the Journal that the sum of Rs. 3,278/- shown as outstanding against the Journal Department was not actually due from the Journal Department, but was simply a classification of outstanding C.F.C. arrears of the Journal Department from Branches in the Balance-sheet. The clarified statement presented by the Honorary General Secretary was passed vide Resolution No. 6 below.

10. *Re. replies to the Universities' Commission Questionnaire Section VIII:*

The action of the Honorary General Secretary was approved and it was further resolved that the replies of the Provincial Branches who differed from the majority of the Provinces on the question of "medium of instruction" be communicated to the Universities' Commission for information.

13(2) *Re. the South India Provincial Branch sending a delegation to the Hon'ble Minister of Health, Government of India:*

A discussion on the correspondence between the Hony. General Secretary and the South India Provincial Branch, as circulated to the members, took place.

Resolved that the matter be postponed till a reply was received from the Council of the South India Provincial Branch, as promised by the President, South India Provincial Branch.

13(3): *Re. Dr. Vinchure's Resolutions relating to (i) Confirmation of Minutes and (ii) Rulings of the Chair:*

Considered the opinion of the Hony. Legal Adviser and resolved that (*i*) the present method of confirming the minutes is correct but in case of discovery of any irregularity noticed in the minutes, a resolution correcting the irregularity should be passed before the minutes are confirmed and

(*ii*) the addition to Rule 10-B(*iv*) is suggested by the Hony. Legal Adviser as not necessary—

13(4): *Re. Propaganda and ethics as suggested by the President:*

Resolved that the report of the Sub-Committee be adopted and effect be given to it forthwith.

14(2)(*ii*): *Re the Indian Medical Association and its branches mentioning in their stationery the words "Member of the World Medical Association" in one form or other:*

Resolved that the words "The Indian Medical Association is a constituent member of the World Medical Association" be printed in the letter-headings and stationery of the Central Office only including those of the Journal Department.

12(*i*) *Re. recovery of amount out of the advance made to Shri. G. D. Bannerji, Ex-employee, Central Office, Calcutta.*

Resolved that legal action be taken against Shri. G. D. Bannerji to recover the sum of Rs. 155/15/6 still outstanding against him.

II. Resolved that the remaining items arising out of the proceedings of the last meeting be approved.

Item No. 5. Formation of Branches:

Resolved that the formation of the following branches be approved.

(i) *Provincial:*

(1) Assam.

(ii) *Local:*

S. No.	*Name of the local branches*	*Provincial Branches*	*No. of members*	*Date of formation*
1.	Malegaon (Distt. Nasik)	Maharashtra & Karnatak	8	1-4-1949.
2.	Dumraon	Bihar	5	1-10-1948.
3.	Chandausi	U. P.	5	1-4-1949.
4.	West Khandesh, Dhulia	Maharashtra & Karnatak	28	1-4-1949.
5.	Mundra Distt. (Kutch)	Direct with Centre	6	1-4-1949.
6.	Bhuj (Kutch)	Direct with Centre	10	1-6-1949.
7.	Erode	South India	7	1-6-1949.
8.	Chikodi	Maharashtra & Karnatak	7	1-6-1949.
9.	Sirmoor (Himachal Pradesh) ..	Direct Branch	12	—
10.	South Suburban Behala	Bengal	26	1-4-1949.
11.	Guptipura	Bengal	7	1-4-1949.
12.	Karad	Maharashtra & Karnatak	16	1-4-1949.
13.	Dharamsala (Kangra Distt.) ..	East Punjab	22	1-4-1949.

Resolved further that the revival of Puddukottoi branch (under South India Provincial Branch) be approved and that the Hony. General Secretary should take steps to recover the C.F.C. arrears, if possible, from the defaulting members.

Item No. 6. Accounts:—Central Office & Journal Department —October, 1948 to March, 1949—as audited by the Auditors of the Association and the Monthly Statements of accounts:

(i) *Central Office: From January '49 to May, 1949.*

(ii) *Journal Department: From March '49 to May, 1949.*

Resolved that the accounts as audited be passed and replies to the objection-notes as read out by the Hony. General Secretary be sent to the Auditors, and that the monthly statements of accounts as presented be noted.

Item No. 7. C.F.C. Arrears:

Resolved that:

(*i*) the sum of Rs. 12/- outstanding as C.F.C. arrears from Dr. Chandar Prakash Grover of Gwalior be written off;

(*ii*) the attention of Tanjore Branch and the South India Provincial Branch be drawn to Rule No. 10-A(*c*) and they be asked to make further efforts to recover the sum of Rs. 27/- due from 9 members of Tanjore Branch and report the result thereof to the Hony. General Secy. before the next meeting of the Working Committee;

(*iii*) the question of arrears due from 24 members of Poona Branch be referred to the Provincial Branch for its opinion;

(*iv*) the South India Provincial Branch be asked to explain what efforts have been made to realize the sum of Rs. 99/- outstanding as C.F.C. arrears from 29 members of the Puddukottoi Branch.

Item No. 8. Engagement, Termination & Confirmation of Staff of Central Office and the Journal Department:

Resolved that the action taken by the Honorary General Secy. and the Journal Commitee be approved.

Item No. 9. Grades of pay of staff of Central Office as recommended by the Honorary General Secretary:

Resolved that the grades as recommended by the Hony. General Secretary be approved.

Item No. 10. Re. Joining of Bellary Branch to a Provincial Branch:

Resolved that the attention of the Bellary Branch be invited to *Rule No.* 6C(*c*) and it be asked to join the Andhra Provincial Branch by the 30th of September, 1949, until such time as the question of allocation of Bellary District to some other province on linguistic basis was settled by the Government.

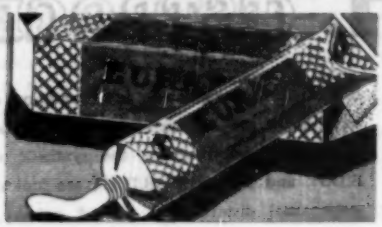
Item No. 11. Re. Report of the Committee on Indigenous systems of Medicine.

Resolved:

(*i*) that a Sub-Committee consisting of (1) Dr. K. K. Sen Gupta (2) Dr. P. K. Guha & (3) Dr. A. K. Sen (Convener) be appointed to prepare a draft report on the subject, within a period of 6 weeks;

(*ii*) that all relevant papers be forwarded by the Hony. General Secretary to Dr. A. K. Sen, the Convener;

(*iii*) that the draft report prepared by the Sub-Committee be circulated to all Provincial Branches and the members of the Working Committee, for their opinions to be expressed within one month of receipt of the draft report;



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(*iv*) that the opinions as in (*iii*) above be forwarded by the Hony. General Secretary to Dr. A. K. Sen, the Convener, for the consideration of the sub-committee and for drafting a final report, for the consideration of the Working Committee."

Item No. 12. Re. Recognition of the Indian Medical Association by Government of India:

Resolved that a further communication from the Government of India be awaited and matter be postponed till then.

Item No. 13. Re. Insurance of the belongings of the Central Office against Fire & Burglary:

Resolved that the proposal of the Hony. General Secretary to insure the belongings of the Central Office against fire and burglary for a sum of Rs. 5,000/- be approved.

Item No. 14. Re. Revision of Medical Council of India Act, 1933:

The Report of the Sub-Committee consisting of

(1) Capt. S. K. Chaudhuri (Banaras) (In the Chair).
(2) Dr. Chamanlal M. Mehta (Bombay).
(3) Dr. G. K. Ghosh (Patna).
(4) Capt. R. C. Goulatia (Delhi).
(5) Lt. Col. Amirchand (Honorary General Secretary)

as circulated to the members was considered.

Resolved that the folowing amendments be forwarded to Government of India for due consideration:—

I. *Objects of the Amendments Proposed:*

1. To include Medical Licentiates in the All-India Register.

2. To give Medical Licentiates representation on the Medical Council of India.

3. To make the Medical Council of India more democratic by curtailing the number of the nominated members.

4. To empower the Medical Council of India to publish the "Indian Pharmacopoeia".

Passed unanimously.

II. *Amendments Proposed:*

1. Delete the word "higher" in line 3 of the preamble before Section 1 of the Indian Medical Council Act 1933.

2. Delete the word "British" where it exists in this Act except in line 2 Clause B, the Second Schedule.

Passed unanimously.

3. All qualifications in modern scientific medicine recognised by the Provincial Medical Councils and registrable in the Provincial Medical Registers shall be included in the First Schedule of the Act.

Passed by 10 against 6.

4. *Sections 3 of the Indian Medical Council Act, 1933:*

(*i*) Substitute Clause (*a*) of Sub-Section (1) of Section 3 by the following:—"One member from each Provincial Medical Council, to be elected by the members of the said Council."

Passed unanimously.

(*ii*) Substitute Clause (*e*) of Sub-Section (1) of Section 3 by the following:—"Two members from each Province where a Provincial Medical Register is maintained, to be elected from amongst themselves, by persons who possess medical qualifications recognised by the Medical Council of India and who are enrolled on the Register."

"Provided that for the first two terms from the first constitution of the Council under this Act, two members shall be elected by those enrolled on the Provincial Register from amongst themselves, of whom one shall be a medical graduate of the University or Universities in the Province and one from amongst the rest."

Passed by 9 against 6.

(*iii*) Delete the "proviso" after the Sub-Section (*2*) of Section 3.

Passed unanimously..

5. *Section of the I.M.C. Act 1933:*

Delete the words "or Schools" in line 5 of Sub-section (3).

6. In "The Second Schedule".

Add the words "The recognition granted under this Schedule to qualifications of countries outside India is only on the basis of direct mutual reciprocity" after the words "Recognised medical qualifications granted by Medical institutions outside India."

Passed unanimously..

7. *Add the following new Section*: "The Medical Council of India shall cause to be published under their direction a Book containing a list of medicines and compounds, and the manner of preparing them, together with the true weights and measures by which they are to be prepared and mixed, and containing such other matter and things relating thereto, as the Medical Council of India shall thank fit, to be called 'The Indian Pharmacopoeia" and the Medical Council of India shall cause to be altered, amended and republished such Pharmacopoeia as often as they shall deem it necessary.

Passed unanimously..

Views of the dissenting members on points marked with asterisk "*" are given below:

*(*i*) 5 members held that Licentiates be registered in Schedule Three.

*(*ii*) 6 members held that in Clause (*c*) of Section 3(1), after the word "possess" in line 5, the remaining part of the Clause should read as follows:—"medical qualifications granted by an Indian University or Indian Nationals registered in Schedule II.

After the Sub-Clause (c) Section 3(1) add the following as Clause (d) and number the existing Sub-Clause (d) as (e).

"Three members to be elected from amongst the medical Licentiates on Provincial Medical Registers by the Licentiate-members of the Provincial Medical Councils in India which should be divided into three groups for this purpose i.e., one from each group."

**Item No. 10 Re. World Medical Association Circular No. N.A. 14/49, dated 28th May, 1949:*

Resolved that the matter be referred to a Sub-Committee consisting of—

1. Dr. B. N. Ghosh (Calcutta).
2. Dr. B. Mukerji (Calcutta).

3. Dr. A. K. Sen (Calcutta, the Convener), for drafting a reply for the consideration of the Working Committee at its next meeting.

Item No. 16: Any other business with the permission of the President:

1. *Re. position with regard to branches in Eastern Pakistan.*

Letter No. Cont. 36(2) 48-49 dated 28th June, 1949 from the Honorary Secretary, Bengal Provincial Branch was read by the Hony. General Secretary.

Resolved that the following branches be declared "Defunct" and C.F.C. due from them as noted against their names to be written off:

Name of the Branch.	*Amount to be written off.*	*No. of members.*	*Period for which the C.F.C. due.*
1. Faridpur	.. 20	10	1st Half 1948-49
2. Gouripore	.. 24	12	1st Half 1948-49
3. Chandpore	.. 16	8	1st Half 1948-49
4. Chapai Nawabganj	10	5	1st Half 1948-49

and further that a sum of Rs. 78 outstanding as c.f.c. arrears against 39 members of Khulna branch for the 1st half of 1948-49 be written off.

2. *Interpretation of Rule 3B* (d)—*"Attached members"—Sought by the Honorary General Secretary:*

Resolved that the Rule is recommendatory and not mandatory, and it is open to a member of the Armed Forces Medical Services, India, to become an ordinary member or an attached member.

3. *Re. Uniformity of Legislation on Sales' Tax on Sale of Drugs by Registered Medical Practitioners:*

Resolved that the Hon'ble Minister of Finance, Govt. of India be requested to place the following recommendation of the Working Committee of the Indian Medical Association before the Hon. Ministers of Finance of Provinces and State Unions, at a Conference understood to be held on or about the 21st of July, 1949.

Recommendation: Recommended that these registered medical practitioners who own dispensaries and dispense medicines only to their patients be exempted from the payment of the Sales' Tax as they cannot be said to carry on business' of selling or supplying goods and consequently to be dealers within the meaning of the relevant section of the Provincial Sales Tax Acts, as already exempted by some of the Provincial Governments, but those who dispense medicines not only to their patients but also to patients of other practitioners and also sell patent medicines or goods to the public should be treated as "any other Chemists and Druggists" and should be assessed to Sales' Tax.

4. *Considered Resolution No. 8 passed by the South India Provincial Branch on 22nd May, 1949 regarding collection of C.F.C.:*

Resolved that the attention of the South India Provincial Branch be drawn to Item No. 13 re. item No. 14(*d*) passed at the I.M.A. Central Council meeting on 23rd December, 1947 at Bombay and it be asked to inform the Central Office whether any action has been taken by it in accordance with the above quoted item.

5. *Interpretation sought by the Hony. General Secretary of Resolution No. 15-B dated 29th & 30th September, 1945 of the Working Committee re. compensation to members of the staff of the Central Office for work done on few days.*

Resolved the words "double their daily wages" means twice their daily wages in addition to their ordinary wages for the day and that the words "excluding Sundays" mean that no extra wages are to be paid for work done on Sundays but a holiday is to be given in lieu of a Sunday in the following week.

6. *Printing of revised Rules of the Indian Medical Association:*

The quotations received from the various presses were considered.

Resolved that 15,000 (Fifteen thousand) copies of the Revised Rules be got printed in the form of a Supplement to the Journal in one volume that one copy of the supplement be annexed to each copy of the Journal of which it will form the supplement; that 1,000 copies be bound in the form of a booklet of dimensions of the present booklet of Rules for distribution to outside bodies and that the remaining copies of the supplement be kept in the Central Office for the use of the new members and branches of the Association.

7. *Considered letter dated 23rd June, 1949 from Bengal Provincial Branch regarding scales of fees for medical examinations of Life Insurance Companies.*

The Proposal that the minimum fee for medical examination of life insurance cases should be Rs. 8/- was deferred and Dr. Chamanlal Mehta was requested to move at Bombay through the Bombay Provincial Branch in the matter of standardisation of Insurance medical fees.

17. *Acknowledments:*

The Working Committee of the Indian Medical Association offers its grateful thanks to:

(*i*) Shri Krishna Ballav Sahai, Hon'ble Minister of Revenue, Bihar, for his very kindly placing his residence at the disposal the members of the Working Committee for their stay in Patna during the period of its meeting;

(*ii*) the Principal, P. W. Medical College, Patna for his very kindly placing the premises of the College at the disposal of Working Committee for holding its meeting on 10th July, 1949;

(*iii*) the Bihar Provincial Branch and the Patna Branch of the Indian Medical Association for the splendid arrangements made by them for the meetings of the Sub-Committees and of the Working Committee on 9th & 10th July, 1949;

(*iv*) Dr. Miss. M. I. John, Dr. T. N. Bannerji, Dr. S. K. Ghosh Dastidar and Dr. G. K. Ghosh for their excellent hospitality to the members of the Working Committee.

With a vote of thanks to the Chair, the meeting came to a close.

Sd./- S. K. CHAUDHURI, *President.* Sd./- LT. COL. AMIRCHAND, *Hon. General Secretary.*

I. M. A., WORKING COMMITTEE—Proceedings of the 33rd meeting of the Working Committee of the Indian Medical Association held at Banaras on 9-10-49.

Members Present: Ex-officio—1. Capt. S. K. Chaudhuri (Banaras), President (in the chair); 2. Dr. A. N. Ghosh (Calcutta), Senior Vice-President; 3. Lt.-Col. Amir Chand (Delhi), Hony. General Secretary; 4. Dr. P. K. Guha (Calcutta), Hony. Joint Secretary; 5. Capt. K. C. Bhattacharji (Allahabad), Hony. Joint Secretary; 6. Dr. R. Sinha (Calcutta), Honorary Secretary, J.I.M.A. (in place of Dr. K. S. Ray, the Editor).

Representatives from the Provincial Branches—7. Dr. A. D. Mukharji (Calcutta); 8. Dr. A. K. Sen (Calcutta); 9. Dr. T. N. Ghosh (Calcutta (in place of Dr. J. Majumdar) —Bengal Provincial Branch. 10. Dr. Chamanlal M. Mehta (Bombay)—Bombay Provincial Branch. 11. Dr. G. K. Ghosh (Patna); 12. Dr. T. N. Bannerji (Patna)—Bihar Provincial Branch. 13. Dr. B. K. Vinchure (Nagpur)—C. P. & Berar and Madhya-Bharat Provincial Branches. 14. Dr. J. V. Joshi (Hubli)—M. & Karnatak Provincial Branch. 15. Dr. F. C. Shori (Amritsar)—East Punjab Provincial Branch. 16. Capt. H. N. Shivapuri (Lucknow); 17. Dr. H. Hukku (Lucknow)—U. P. Provincial Branch.

Co-opted Members—18. Col. J. B. Vaidya (Banaras); 19. Dr. S. Samaddar (Patna); 20. Dr. S. Khanna (Banaras); 21. Capt. A. P. Misra (Banaras); 22. Dr. R. N. Maitra (Banaras); 23. Dr. (Mrs.) B. Thungamma (Banaras).

1. *Messages of regret*—The following members sent messages of regret for their inability to attend the meeting :

1. Dr. M. Atal (U.P); 2. Capt. P. B. Mukerji (Treasurer); 3. Dr. B. V. Mullay (Maharashtra and Karnatak); 4. Dr. S. C. Sen (Hony. Joint Secretary); 5. Dr. P. A. S. Raghavan (South India); 6. Dr. A. K. Rajgopalan (South India); 7. Dr. M. V. Krishna Rao (Andhra); 8. Dr. P. R. Trivedi (Gujarat & Kathiawar); 9. Dr. K. S. Ray (Editor, J.I.M.A.); 10. Dr. J. Majumdar (Bengal); 11. Dr. R. A. Bhagwat (Madhya Bharat); 12. Capt. R. C. Goulatia (Delhi)—Co-opted.

2. *Condolence Resolution*—The following resolution was moved from the Chair and passed unanimously, all members standing :

"The Working Committee of the Indian Medical Association places on record its deep sense of sorrow at the sad demise of the following members of the Association and conveys its heartfelt sympathy and condolence to the members of the bereaved families."

1. Dr. V. Narayanaswami (Tanjore); 2. Dr. B. Jayaram; (Tanjore); 3. Dr. N. N. Gupta (Bhagalpur); 4. Dr. B. B. Mukherjee (Bhagalpur); 5. Lt.-Col. D. P. Bhargava (Delhi); 6. Dr. K. N. Dhondiyal (Garhwal); 7. Dr. Robi Bose (Calcutta).

Resolved further that copies of this Resolution be forwarded to the members of the bereaved families.

3. *Conformation of the proceedings of the last meeting of the Working Committee held at Patna on the 10th July, 1949.*

On a point being raised by Dr. Vinchure it was resolved that No. 3. 13(3) Sub-Clause (*i*) should read :

"The present method of confirming the minutes is correct, but in case of discovery of any irregularity noticed in the minutes a resolution correcting the irregularity should be passed before the minutes are confirmed."

The proceedings as circulated and corrected according to the above Resolution, were considered and it was resolved that they be confirmed.

4. *Business arising out of the last meeting*—

(*a*) 4. 12(2) Re. the South Indian Provincial Branch sending a delegation to the Honourable Minister of Health, Government of India.

(*i*) Letter No. 704/48-49 dated 26-9-1949 from the Honorary Provincial Secretary to the effect that the Working Committee of the South Indian Provincial Branch approved the action taken by the President of that Branch, was read out by the Honorary General Secretary.

Resolved that the South Indian Provincial Branch be informed that its action amounted to an irregularity and that it be requested to conform to the RULES in future.

(*ii*) In the same connection a letter received by the President from the President of the South Indian Provincial Branch objecting to the fixing of the 9th of October as the date of the Working Committee meeting in view of the South Indian Provincial Conference, was read.

The Honorary General Secretary informed the house that a circular letter was issued to all the Provincial Branches, on 27th July, 1949 enquiring the dates of any Conference they were likely to hold during the month of October. A reply from the South Indian Provincial Branch was received on the 8th of September, '49, but the date for the meeting of the Working Committee had already been fixed. The Working Committee felt satisfied that due notice had been given to the South Indian Provincial Branch.

(*b*) 4. 12(1) Re. recovery of amount out of the advance made to Sjt. G. D. Bannerji, Ex-employee, Central Office, Calcutta.

The Honorary General Secretary related the steps he had taken in consultation with Dr. P. K. Guha and read out a

letter from Sjt. Bannerji addressed to Dr. P. K. Guha, copy to the Central Office, wherein Shri Bannerji had requested that the amount outstanding against him be written off.

Resolved that the decision already taken by the Working Committee on 10th of July, 1949 that legal action be taken against Shri Bannerji, be adhered to.

(*c*) 7. Re. C. F. C. arrears:

Resolved that these three items be postponed and reminders be issued by the Honorary General Secretary to the branches concerned.

(*d*) 10. Re. joining of Bellary Branch to a Provincial Branch:

Letter No. nil, dated nil received from the Honorary Secretary, Bellary Branch requesting the Working Committee not to press the matter further and to permit the *status-quo* to remain, was read by the Honorary General Secretary.

Resolved that in view of the fact that this matter is of fairly long standing and has come up before the Working Committee on several occasions and that as it is not possible to permit the *status quo* to continue indefinitely, the Bellary Branch be directed to join the Andhra Provincial Branch as already decided at the Working Committee meeting held on 10th July, 1949 at Patna.

(*e*) 11. Re. report of the Committee on the Indigenous Systems of Medicine.

The draft prepared by the Sub-Committee consisting of Dr. A. D. Mukharji, Dr. P. K. Guha, Dr. A. K. Sen, Dr. A. C. Ukil and Dr. K. K. Sen Gupta was considered.

Resolved that as it was desirable that the opinion of the Indian Medical Association be submitted to the Government of India without any further delay, the opinions received from the Provincial Branches, if any, on the draft already circulated to them be forwarded by the Honorary General Secretary on 22nd of October, '49, to Dr. A. K. Sen, the convener, for a final report to be prepared by the Sub-Committee and sent to the Central Office by the end of this month for submission to the Government of India, with the approval of the President.

Further the Honorary General Secretary was to request all the Provincial Branches to send a copy of their opinion on the subject to Dr. A. K. Sen direct with a copy of the same to the Central Office, not later than 22nd of October, 1949.

(*f*) 12. Recognition of the Indian Medical Association by the Government of India:

Postponed.

(*g*) 13. Re. World Medical Association Circular No. A. 14/49 dated 27th May, 1949:

I. Dr. A. K. Sen pointed out that some words were inadvertently omitted in the "REPORT" sent by him to the Central Office. The Honorary General Secretary was directed to correct the Report and to send a "correction slip" to the World Medical Association.

The action of the Honorary General Secretary in sending a reply to the World Medical Association with approval of the President, in anticipation of the formal approval of the Working Committee, was approved.

II. Resolved that the Provincial Branches be asked to submit lists of candidates for medical fellowships granted by WHO for selection by the Standing Educational and Scientific Committee of the INDIAN MEDICAL ASSOCIATION and that in the meanwhile, Government of India be approached for further information on the subject.

(*h*) 16-4. Re. Resolution passed by the South Indian Provincial Branch on 22nd May, 1949 regarding collection of C. F. C.

Postponed. A reminder to be sent by the Honorary General Secretary to the South Indian Provincial Branch.

(*i*) 16-7. Re. letter dated 23rd June, 1949 from the Bengal Provincial Branch regarding scales of fees for medical examinations of Life Insurance Companies:

Dr. Chamanlal M. Mehta promised to send his Report at an early date.

Resolved that the matter be postponed and the Bombay Provincial Branch be requested to take early action in the matter.

III. Resolved that the remaining items arising out of the proceedings of the last meeting be approved.

5. *Formation of Branches*—

Resolved that the formation of following branches be approved:

S. No.	Name of the local Branch:	Provincial Branch	No. of members	Date of formation
1.	Sidhpur	Gujarat & Kathiawar	6	10-7-1949
2.	Mandvi (Cutch)	(Branch to elect as per Rule 6 B(c)	10	14-7-1949
3.	Mhow (Cantt.)	Madhya Bharat	9	1-10-1949
4.	Salepur	Orissa	7	29-9-1949
5.	Shivpuri	Madhya Bharat	5	29-8-1949
6.	Hapur	U. P.	8	1-10-1949
7.	Katihar	Bihar	22	1-10-1949

6. *Accounts—*

(*i*) *Audited accounts*—Central Office from April, '49 to June, 1949:
Journal Dept. from April, '49 to June, 1949:

(*ii*) *Monthly statements of accounts*—Central Office from June, 1949 to August, 1949:
Journal Department from July, 1949 to August 1949:

Resolved that the accounts as audited be passed and replies to the objection not as read out by the Honorary General Secretary be sent to the Auditors, and that the monthly statements of accounts as presented be noted.

7. *Writting off C. F. C. arrears and advances—*

(*i*) *Re. amount of Rs. 99/- due from Puddukottah Branch.*

Resolved that the matter be postponed and further enquiries be made by the Honorary General Secretary from the South Indian Provincial Branch.

(*ii*) *Re. advance of Rs. 40/- advanced to Dr. V. V. Dhurandhure of Poona*:

Resolved that a sum of Rs. 40/- advanced to Dr. V. V. Dhurandhure of Poona who took part in the Bengal Medical Relief be written off.

8. *Engagement and confirmation of staff of Central Office*—Approved.

9. *Consideration of Letter No. N. A. 20/49 dated 3rd August, 1949 from the World Medical Association*—Noted.

10. *Consideration of copy of a letter dated 2nd August, 1949 from the World Medical Association to the Secretary, Government of India, Ministry of Health, New Delhi*—Noted.

11. *Consideration of copy of a letter dated 12th August, 1949 from The World Medical Association*—

(*i*) The reply received from the World Medical Association as circulated and the replies received subsequently and read by the Honorary General Secretary before the house, were noted.

(*ii*) The Honorary General Secretary was asked to approach the Government of India on the subject of arranging for eminent Professors from abroad to visit the Indian Universities Centres on short lecture tours.

At this stage Capt. S. K. Chaudhuri, President left the chair for a few minutes and Dr. A. N. Ghosh, the Senior Vice-President took it during this interval.

12. *Consideration of letter No. N. A. 11/49 dated 25th May, 1949 from The World Medical Association*—The action of the Honorary General Secretary was approved.

13. *Consideration of suggestion of the Honorary General Secretary to amend the T. A. Rules*—Resolved that the amendments to the T. A. Rules as proposed by the Honorary General Secretary be approved.

14. *Election of President and Vice-Presidents*—Dr. R. Sinha, one of the scrutineers read out the result of counting of ballot papers.

(1) *Office of the President for 1949-50* :

Dr. Chamanlal M. Mehta (Bombay)	74 votes.
Lt.-Col. T. S. Shastry (Madras)	12 votes.
Dr. P. D. Khanolkar (Kolhapur)	3 votes.
Dr. T. N. Bannerji (Patna)	57 votes.
Dr. M. V. Ramana Murthy (Vizagapatam)	5 votes.
Dr. F. D. Khanolkar	1 vote.
Dr. A. N. Ghosh (Calcutta)	1 vote.

Resolved that Dr. Chamanlal M. Mehta (Bombay) be declared duly elected to the office of the President of the Association for the year 1949-50, having secured the largest number of votes from the Branches.

(2) *Offices of 3 Vice-Presidents for 1949-50:*

The following three members were found to have secured the 3 highest number of votes as shown against their names :

1. Dr. B. D. Yodh (Bombay) .. 38 votes.
2. Dr. A. K. Sen (Calcutta) .. 28 votes.
3. Dr. H. N. Hukku (Lucknow) .. 28 votes.

Resolved that Dr. B. B. Yodh (Bombay), Dr. A. K. Sen (Calcutta) and Dr. H. N. Hukku (Lucknow) be declared elected Vice-Presidents of the Association for the year 1949-50.

Two ballot papers received after the 30th of September, '49 and one ballot paper accompanied by an open letter containing the names of the candidates elected by the Branch concerned were declared by the President as invalid and 50 ballot papers received from Branches on whose behalf C.F.C. had not been received in full as laid down in Rule 18 G(a) were not counted.

15. *Consideration of an extract from letter No. 118/48-49 dated 4th August, 1949 from the Honorary Secretary, Amritsar Branch of the Indian Medical Association*—

Resolved that the relevant paragraph of Circular No. 6/47-48 dated 6-4-1948 (re. Internal Discipline) from the Honorary General Secretary to the Branches be regarded as recommendatory and not mandatory and that the Honorary General Secretary should issue another Circular to the Branches pointing out to them the above interpretation of the Circular under reference and impressing upon the members through their respective branches that if on the invitation of a Government or other authenticated body they were appointed as members of Committees, Advisory Boards and Councils etc. pertaining to health matters, it was their duty to request the Government or other appointing authorities concerned to appoint a nominee of the Indian Medical Association also in consultation with the Central Office of the Indian Medical Association or its respective Provincial Branch.

16. *Consideration of letter No. 2155/3P-57-48 dated 16th August, 1949 from the Secretary, Public Service Commission, C. P. and Berar, Nagpur and the reply of the Honorary General Secretary thereto:*

Action of the Honorary General Secretary was approved.

Further resolved unanimously that this meeting of the Working Committee of the Indian Medical Association learns with concern the very low remuneration offered for the various categories of the staff of the Medical College, Nagpur and records its sense of resentment against the same, as this meeting is of the considered opinion that to these posts are attached onerous responsibilities of teaching the future members of the medical profession and as such they should carry adequate salaries commensurate with the high responsibilities and urges upon the Government of C. P. and Berar to revise the scale of pay for the posts and re-advertise them.

The Working Committee also urges upon the members of the Indian Medical Association not to offer themselves for these posts on the terms already advertised.

17. *Ratification of proposal of the British Commonwealth Medical Conference to raise the contribution of the I. M. A. towards sending a delegate to the British Commonwealth Medical Conference to be held in Australia in 1950 from £38-19s.-8d. to £80.*

Resolved that the proposal of the British Commonwealth Medical Conference to raise the contribution of Indian Medical Association towards sending a delegate to its next Conference in 1950 from £38-19s.-8d. to £80-0-0 at 2 per cent membership strength and capacity to pay be ratified.

Arising from the Note on the British Commonwealth Conference held at Saskatoon (Canada) on June 7-8-9, 1949, by Dr. S. C. Sen, read by the Honorary General Secretary, the Working Committee was unanimously of the opinion that the offer from Canada of 3 posts for post-graduate work should have been taken to be an offer to the Association whose representative Dr. S. C. Sen was, and the selection should have been made by the Association and not by Dr. S. C. Sen, and resolved that in future if there was a similar offer, the selection of candidates should be made by the Association, as was done in the case of "Watumull Foundation Scholarship."

The President was requested to write to Dr. S. C. Sen in this connection to clear the point.

18. *Consideration of a letter No. 8028 dated 9-9-49 addressed to the Secretary, Government of India, Ministry of Health, New Delhi, by the Honorary General Secretary, regarding import of drugs, medical journals and books etc.*

The action of the Honorary General Secretary was approved.

19. *Any other business with the permission of the President*—

The Honorary General Secretary read out letter No. 1545/60/48-49 dated 19th September, 1949 from the Secretary, U. P. Provincial Branch on the subject of adulteration of mustard oil and Epidemic Dropsy in U. P.

Resolved that in the interest of public health of India, the sale and supply of essential commodities of food should be controlled by a Federal Pure Food Act and the Government of India be requested to initiate such a legislation immediately and to compile and set up uniform standards of purity of the essential food commodities, to be enforced all over the Indian Union.

2. The Honorary General Secretary read out letter dated 15th September, 1949 from Malabar Branch regarding the recent cut in petrol.

Resolved that Malabar branch be asked to refer the matter to its Provincial Branch.

3. The Honorary General Secretary referred to the question of period of Research Scholarships to (1) Dr. D. K. Palker (Bombay); (2) Dr. Byomkesh Bhattacharyya (Calcutta and (3) Dr. Harisadhan Datta (Calcutta).

Resolved that Research Scholarship to Dr. D. K. Palker (Bombay) be discontinued at his request with effect from 1st September, 1949 and he be asked to send a copy of his work attested by the Professor under whom he was working, for record in the Central Office and that the Honorary General Secretary should write to the Professors under whom the remaining two Scholars are working respectively, and the matter be brought before the Working Committee at its next meeting.

4. Letter No. 2712 dated 23rd September, 1949 from the General Secretary, All-India Medical Licentiates' Association was read out by the Honorary General Secretary.

Resolved that the Honorary General Secretary should intimate the General Secretary of the All-India Medical Licentiates' Association the steps already taken by the Indian Medical Association in connection with 3 years course started by the C. P. and Berar Government and further to request the General Secretary of the All-India Medical Licentiates Association to expedite the amalgamation of the All-India Medical Licentiates Association with the Indian Medical Association.

5. The Honorary General Secretary read out a copy of letter No. C. 37/49 from the World Medical Association regarding a letter sent by the All-India Medical Licentiates Association to the World Medical Association for its recognition and the Article of the Constitution of the World Medical Association relevant to the subject.

The house noted the information.

6. Letter No. 151 dated 27-9-1949 from the Secretary, Madhya Bharat Provincial Branch relating to disclosure of stock of foreign medicines with the registered medical practitioners, particularly of U. S. A., and of all foreign goods in general, was read out by the Hony. General Secretary.

Resolved that it was the duty of the medical practitioners to co-operate with the Government in this important matter.

7. The Honorary General Secretary informed the house that the report of the Homoeopathic Enquiry Committee was about to be released and Committee on the Indigenous Systems of Medicine appointed be asked to go into this report and submit its opinion if possible, for the consideration of the Working Committee at its next meeting in December, 1949.

The suggestion of the Honorary General Secretary was adopted and he was instructed to make available copies of the Report to the members of the Sub-Committee free for *perusal and return*, and to the Provincial Branches on payment, as soon as the Report became available in the market.

8. On a suggestion by Dr. P. K. Guha, the house requested the Honorary General Secretary to take up the question of deductions allowed by Income-tax Department for the maintenance of motor car, chambers, dispensaries etc. by medical practitioners and to write to the British Medical Association and American Medical Association in this matter for necessary information.

9. Re. programme of the next Annual Meeting of the Working Committee and the Central Council to be held at Allahabad:

The house agreed that the Working Committee should meet on 25th of December, 1949 at 10 A.M. and the Central Council on 26th December at 12 noon, and again on 29th of December at a time to be notified later, in consultation with the President and the President-Elect.

With a vote of thanks to Capt. S. K. Chaudhuri for presiding over the meeting and to him, Col. J. B. Vaidya, and other members of the Banaras Branch for their kind and generous hospitality to the members of the Working Committee, the meeting came to an end.

Sd./ S. K. Chaudhuri, *President.* *Hony. Genl. Secretary.* Sd/- Lt.-Col. Amirchand.

XXX

ASANSOL BRANCH—The Annual General meeting was held on 12-12-48 at 4 P.M. with Dr. B. Gupta, the president in the chair:

The resolution of Dr. G. Bose as read at the meeting and it was proposed to discuss the grievances of the medical officer as stated in the resolution and this branch will utilise its good offers for the redress of the same. The opinion of the medical officers and the management will be sought for the same at the earliest opportunity.

The Annual report of the Hony. Secretary Dr. H. N. Mukherjee was read and the statement of accounts as put forward by the Hony. Treasurer was unanimously passed.

The following were elected as office-bearers of this Branch for the year 1948-49:

President—Dr. A. C. Lahiry. *Vice-President*—Dr. S. Roy. *Hony. Secretary*—Dr. S. C. Roy. *Hony. Jt. Secretary*—Major A. T. Das. *Hony. Treasurer*—Dr. A. K. Chakravorty.

The retiring President Dr. B. Gupta made an illuminating speech with an appeal to the members for the improvement of the Association.

The meeting terminated with vote of thanks to the Chair and light refreshment.

* * * * *

The following resolution was passed at the meeting of the Medical Practitioners of Asansol held under the auspices of the Indian Medical Association, Asansol Branch on 27-2-49.

"The Medical Practitioners of this area place on record their deep sense of sorrow at the demise of Dr. Mon Mohon Chakraborty, the seniormost and one of the leading practitioners of this town who died at Asansol on Thursday, the 10th February, 1949. His death has caused an irreparable loss to the public in general and to the members of the profession in particular.

We all pray to God that his soul may rest in peace."

Further resolved that a copy of this resolution be sent to the members of the bereaved family.

BENGAL PROVINCIAL BRANCH—Minutes of proceedings of meeting of Bengal Provincial Council, held on 19-7-1949, in the Association Hall, 67, Dharamtala Street, Calcutta with Dr. Aghore Nath Ghosh in the chair:

Secretaries' report on certain important communications received since the last meeting of the Council:—

The Jt. Hony. Secretaries reported as follows:

"That as per direction of the Council at its meeting held 20-3-49, a representation was made to the Government of West Bengal, *re.* countersignature of medical officer-in-charge, Gate Dispensary, Rifle Factory, Ichapur, on the medical certificate issued by the registered medical practitioners to an employee of the Factory.

In reply, the Dy. Director of Health Services, Government of West Bengal has forwarded to this office a copy of their letter No. H|R|9R|3|49|6098(2)|1 dated 30th June, 1949 (addressed to the Director-General of Ordinance Factory, Calcutta and the Officer-in-charge, Rifle Factory, Ichapur) which runs as follows:—

"I have the honour to forward herewith copies of correspondence.....and to state that provisions of the Bengal Act—IV of 1914 have done away with the system of countersignature by any other Medical Officers on medical certificates issued to their patients by the Registered Medical Practitioners. As Dr. M. M. Banerjee is a Registered Medical Practitioner, the medical certificates issued to his patient Shree Gour Mohan Ghosh do not require the countersignature of the medical officer-in-charge, Gate Dispensary Rifle Factory, Ichapur."

The House directed the Secretaries to forward the relevent portion of the Government reply to Dr. M. M. Banerjee, for his information.

Report from Medical Education and Hospital Standing Committee—The Jt. Hony. Secretaries informed the House that the *ad-interim* Report of the above Committee had been circulated to the members and also placed the same before the House for consideration.

Dr. P. K. Guha, Convener of the said Committee placed before the House the *ad-interim* report.

The *ad-interim* report was taken for discussion, item by item.

Condensed M.B. Course—As a large number of medical licentiates are eager to take up "Condensed M.B. Course", the I.M.A., Bengal Provincial Branch recommends to the Government of India and the Government of West Bengal as well as to the University of Calcutta to make necessary arrangements for the training of medical licentiates for such a course, for at least 15 years more. This would not only enable the medical licentiates to obtain better medical training, but would also, in the long run, benefit the common people in rural as well as urban areas which these doctors are serving.

The I.M.A., Bengal Provincial Branch was surprised to hear that the Government of India have already decided to close the Lake Medical College by the end of 1951 or the beginning of 1952. Dr. A. K. Sen recalled, in this connection the following speech of Hon'ble Rajkumari Amrit Kaur delivered during the closing ceremony of the Silver Jubilee Session of the All-India Medical Conference:—

"The Lake Medical College which was until recently admitting only *ex*-service licentiates, has now been thrown open to civilian licentiates as well. We have already admitted 14 of the latter for the current course and as the number of *ex*-service licentiates is expected to decrease it will be possible to admit more and more civilian licentiates in this college."

Dr. P. K. Guha supported this statement of Dr. Sen and said that the Hon'ble Minister of Health to the Government of India gave a broad hint at that time that the Lake Medical College would be continued for a few years more to cater for the civilian medical licentiates.

Dr. A. N. Roy then moved the following resolutions which were seconded by Dr. C. Banerjea and were passed unanimously:—

"Resolved that the Government of India be requested to continue to run the Lake Medical College and its attached hospital, for a few years more, in order to afford facilities to the civilian medical licentiates for obtaining the requisite training for Condensed M.B. Course."

"Resolved further that the Government of West Bengal be requested to approach the Government of India immediately for the issue of necessary orders in this connection."

BERHAMPORE (GANJAM) BRANCH—The members of the Berhampore Branch of the I. M. A., at a meeting held on 14-12-49, unanimously passed the following resolution, after reading the letters sent to this Branch by the President and the Vice-President of the Orissa Provincial Branch of the I.M.A. from time to time.

The resolution runs thus:—

"Read letters sent to this Branch by the President of the O.P.B. of the I.M.A., dated 22-7-49 and 2-8-49 respectively, and subsequently, by the Vice-President, dated 5-12-49. After due consideration, this Association unanimously resolved to join the Orissa Provincial Branch of the I.M.A. forthwith."

CALCUTTA BRANCH—A meeting of the Executive Committee of the I.M.A., Calcutta Branch, was held on Tuesday, the 3rd May, 1949, at 7-10 P.M. at the Association Hall at 67, Dharmtala Street, Calcutta. Dr. P. C. Ray presided and 18 members were present.

The Proceedings of the meeting held on 12-4-49 were read and confirmed.

It was decided that henceforth the proceedings should be confirmed after necessary correction of matters which might be found unconstitutional.

Dr. P. K. Chatterjee and Dr. K. K. Sen Gupta were elected representatives of the I.M.A. to the Anti-epidemic Committee of Calcutta Corporation and the Visiting Commitee of the P. G. Hospital, respectively.

Dr. M. K. Roy Choudhury pointed out that on 28-4-49 rowdy mob got into the compound of the Calcutta Medical College Hospital and interfered with hospital works and mal-handled the Principal. It was decided that an enquiry be made into this matter from the Principal.

Dr. Amiya Banerjee pointed out that on 30-4-49 the ambulance of the Peoples Relief Committee was seized by the Police and the driver was arrested. But no charge has been put up against the P.R.C. up till that day. The President directed the matter to be taken up in the next meeting.

The additional agenda to discuss the matter arising out of the hunger-strike of the political prisoners including some doctors and medical students, was ruled out of order.

GWALIOR BRANCH—Minutes of the third meeting of the Gwalior Branch of the I.M.A. held in the Lecture Theatre of the G.R. Medical College on 13-8-49, at 4 pm., with Dr. B. Sahai, I/C, President in the chair. About 20 members were present.

Dr. Amar Nath Ghei delivered a lecture on the "Ayurvedic Medicine."

Dr. N. F. Lillauwala said that there were good points regarding the Ayurvedic treatment, but these needed research and proper investigations.

Dr. B. Sahai remarked that what was taking place at this transition period was the result of perfect misunderstandings.

* * * * * *

Minutes of the fourth meeting of the Galior Branch, held in the Lecture Theatre of the G. R. Medical College on 20-9-49, with Dr. B. Sahai I/C, President in the chair. About 20 members were present.

The proposed speaker Dr. J. L. Razdan delivered a lecture on x-ray in the diagnosis of chest diseases and exhibited many x-ray films.

* * * * * *

The fifth meeting of Gwalior Branch I.M.A., held in the Lecture Theatre of the G. R. Medical College, on 11-10-1949 with Dr. J. L. Razdan in the chair.

About 40 members attended the meeting.

Clinical cases were presented by Dr. N. F. Lillauwala.

* * * *

A meeting of the Gwalior Branch, I.M.A. was addreesed by Dr. M. V. Mulye, M.S., Resident Surgeon, Whipps Cross Hospital, London, in the Lecture Theatre of G. R. Medical College on 27-10-1949.

He spoke on "National Health Programme in England".

GHUGUDANGA BRANCH—Minutes of a special general meeting of the Ghugudanga Branch, I.M.A., West Bengal, held on 13-11-1949, at the residence of Dr. D. R. Kundu, with Dr. S. Sarkar in the chair.

17 Doctors attended.

Proceedings of the last meeting held on 23-10-49 were read and confirmed.

Rules, Regulations and Bye-laws of the Ghugudanga Branch were read and provisionally framed.

Dr. S. N. Mitra's residence was selected as place of next meeting on 10-12-49, at 4-30 p.m.

Dr. R. N. Sircar agreed to read a paper on "General Amsarca" in the next meeting.

Two new members were enrolled.

A paper on "Role of Streptomycin" was read by Dr. D. R. Kundu and all doctors present, participated in the discussions.

"Members of the Kanpur Branch of the Indian Medical Association express their profound grief at the sudden and sad demise on the 29th Dec., 1949 of their highly esteemed colleague Dr. M. X. De. Noronha who was member of the Central Council of the Indian Medical Association, Treasurer of the Provincial Branch and past President of the Local Branch consecutively for two years. The Association has lost one of its most enthusiastic workers and builders and conveys its heartfelt sympathies to the members of the bereaved family."

KATWA BRANCH—Extracts from proceedings of a meeting of the medical practitioners of Katwa Town held in the house of Dr. D. P. Mukherjee on 28-5-49 at 5-30 P.M.

Resolved that a marble plate bearing the name of Late Dr. Satyahari Chatterjee should be placed in a prominent position of the building he occupied last which is now in possession of Sjts. Kalipada Dutta & Brothers and where a Dharamsala is under construction at Atuhat.

Further resolved that the Civil Surgeon, Burdwan, be approached to find out ways and means to allot a bed in the name of Late Dr. Satyahari Chatterjee, M.B. in the Katwa Hospital.

Resolved that antituberculosis association organisation be formed in the town and if possible, in the Sub-Division.

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